

# **CA-IDMS<sup>®</sup>/SASO**

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User Guide  
15.0



Computer Associates

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## About This Guide

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# Purpose

This guide provides the necessary information to run CA-IDMS/Standards Administration System Online (CA-IDMS/SASO). In addition, the many features that CA-IDMS/SASO offers are documented to assist you.

# Organization

Chapter	Description
1	Provides a summary of the features of CA-IDMS/SASO.
2	Consists of eight sections. The first section, Getting Started, introduces the logon and logoff procedures and the CA-IDMS/SASO options. The remaining sections provide detailed information on the options found on the Primary CA-IDMS/SASO Menu screen.
3	Describes each batch utility and its function. Some of the batch processes discussed include: procedures for replacing entire documents, comparing two independent documents to derive the differences, and off-loading and uploading document updates. Batch utility reports and other printed output are also described.
4	Provides operational considerations for CA-IDMS/SASO.
5	Provides a list of all informative, error, and warning messages generated by CA-IDMS/SASO, along with reasons for occurrence and suggested actions to be taken.
Appendix A	Explains how to establish a multiple CA-IDMS/SASO database environment.
Index	Provides an alphabetical list of terms and concepts with their locations in this guide.

## CA-IDMS/SASO Publications

In addition to this guide, Computer Associates supplies the following documentation:

Name	Contents
JCL and Keys	The JCL and related detailed keys used to operate CA-IDMS/SASO in a batch environment are downloaded from your installation tape.
Online Documentation	CA-IDMS/SASO includes online documentation in the form of HELP screens and messages facilities.
CA-IDMS Installation and Maintenance Guide	An installation guide is provided to use as a reference tool and gives complete information about the installation of your product.

# Chapter 1. General Information

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This chapter defines CA-IDMS/Standards Administration System Online (CA-IDMS/SASO) and also discusses its features.

## **1.1 CA-IDMS/SASO Defined**

CA-IDMS/SASO is an interactive online tool that enhances the communication of standards and guidelines. It also provides an alternative to printed documents.



## 1.2 Standards Installed on a CA-IDMS Database

CA-IDMS/SASO uses CA-IDMS as its database management system. The Standards, Procedures and Guidelines (SP&G) manual is provided as the text for the initial load into the database.

When a document is fully contained on an CA-IDMS database, features inherent with CA-IDMS are available, including:

- Share-ability
- CA-IDMS Recoverability
- CA-IDMS Backup and Restoration
- CA-IDMS Security.

CA-IDMS/SASO, on a CA-IDMS database, allows you to:

- Selectively provide online access to CA-IDMS/SASO features, documents, and document components
- Automatically generate online and printed reports of subject, topic, or keyword indexes
- Automatically generate online displays and printed output of subject and topic interrelationships
- Systematically search a document for a specified search string and report the results online.

## 1.3 Multiple Database Environment

CA-IDMS/SASO features a multiple database environment under a single central version (CV). When your documentation is housed on the CA-IDMS database, you can use all of the online and batch features of CA-IDMS/SASO to access and maintain the documentation.

## 1.4 Organization of the Document

Documents are organized by chapter, subject, and topic. This arrangement makes a document easy to maintain and simplifies the application of enhancements. See Exhibit 1.1 for an example of document organization.

```
Chapter 1
  Subject 1.1
    Topic 1.1.0
    Topic 1.1.1
  Subject 1.2
    Topic 1.2.0
    Topic 1.2.1

Chapter 2
  Subject 2.1
    Topic 2.1.0
    Topic 2.1.1
  Subject 2.2
    Topic 2.2.0
    Topic 2.2.1
```

*Exhibit 1.1: Document Organization*

## 1.5 CA-IDMS/SASO Security

The CA-IDMS/SASO integrated security feature provides security checking for user authority to access CA-IDMS/DC secured resources at the following levels:

- CA-IDMS/SASO tasks
- Documents
- Chapters.

The online print function can be secured through specification of symbolic USERID and PASSWORD for input to job control statements.

## 1.6 Document Enhancements

CA-IDMS/SASO features an easy method for creating and applying enhancements to your company documents. Document updates are created by you using CA-IDMS/SASO batch or online utility functions. These utilities compare two documents, placing the differences derived in the release maintenance area of your database.

Once a document update or a set of document updates is loaded into your database, you can then select and apply the enhancements you want to permanently incorporate into your document.

## **1.7 Online Access to Documents**

Once installed, any CA-IDMS/SASO document can be accessed online using menu-driven screens. CA-IDMS/SASO includes several features that allow you to browse, modify, and reorganize a document.

### **1.7.1 Browse Through Topic Text**

The browse feature enables you to access and read any CA-IDMS/SASO document that resides on the CA-IDMS/SASO CA-IDMS database. It does not allow you to create, modify, or delete text.

### **1.7.2 Modify Topic Text**

The edit feature allows you to establish topic text using various text editing functions. These text editing functions enable you to create, change, or delete text. Print control characters can also be imbedded within topic text.

These print control characters let you highlight and underline words, control line spacing, control page ejection, center lines of text, and mark blocks of revised text.

### **1.7.3 Reorganize Document**

You can reorganize a document by changing the order of chapters, subjects, and topics.

Entire chapters, subjects, or topics can be relocated from one position to another position within the same document.

## 1.8 CA-IDMS/SASO Online Documentation

CA-IDMS/SASO provides you with comprehensive online documentation.

CA-IDMS/SASO online documentation includes:

- Detailed information for all CA-IDMS/SASO screens
- Guide to CA-IDMS/SASO commands
- Guide to edit and browse commands
- Online Message Facility
- Online Documentation Print Utility.

## 1.9 Other Important CA-IDMS/SASO Online Features

CA-IDMS/SASO includes other features that enable you to utilize any CA-IDMS/SASO document as an efficient online tool.

### 1.9.1 Define Topic Keywords

The topic keyword feature allows authorized users to create, change, or delete specific topic keywords. When one or more keywords are selected, all related topics are displayed.

### 1.9.2 Define Related Subjects

The related subjects feature lets an authorized user create or delete subject relationships. When a subject is selected, all related subjects are displayed.

### 1.9.3 Provide for Print Control

The online print control facility enables you to:

- Print an entire CA-IDMS/SASO document
- Print ranges of chapters, subjects, or topics
- Print selected chapters, subjects, topics, or indexes
- Implement CA-IDMS/SASO word processing commands
- Implement user-defined print control directives
- Direct print output to TAPE or DISK.

### 1.9.4 Retain Unique Profiles

CA-IDMS/SASO includes retention of user profiles and/or retention of profile information by terminal identifiers.

The profile retention feature enables you to retain:

- Document name last specified for access
- Chapter, subject, and topic reference identifiers last specified for access
- Subject, topic, and topic keyword index names previously specified for access
- Job information specified for print request
- PF key definitions
- Text editing line commands and scroll options.



### 1.9.5 Recover to Previous CA-IDMS/SASO Session

The recovery feature allows you to recover to the previous screen you were accessing when an abnormal exit from CA-IDMS/SASO occurs.

In order to recover successfully, you must specify either of the following at the CA-IDMS/SASO recovery screen:

- The user ID entered during CA-IDMS/DC signon
- The logical terminal identifier.

**Note:** If the central version (CV) becomes inactive for any reason, recovery to the previous CA-IDMS/SASO session **is not possible**.

## 1.10 CA-IDMS/SASO Customization Macro

You can use the CA-IDMS/SASO product tuning macro ESSTPARM to modify the following:

- Direct dictionary access to online documentation
- Change default task code
- Change default document name
- Supply default print request JCL job card lines.

## Chapter 2. CA-IDMS/SASO Sessions

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---

This section provides information about signing on to CA-IDMS/SASO, the options that can be selected from the CA-IDMS/SASO Primary Menu screen, and the signoff procedure.

## 2.1 Getting Started with CA-IDMS/SASO

This section gets you started with CA-IDMS/SASO by describing:

- How to sign on to CA-IDMS/SASO
- The Primary CA-IDMS/SASO Menu Screen and the CA-IDMS/SASO options: Browse, Edit, Utilities, Maintenance, Document Utilities, Tutorial, and Exit
- CA-IDMS/SASO structure lists
- How to sign off of CA-IDMS/SASO.

### 2.1.1 Signing on to CA-IDMS/SASO

To sign on to CA-IDMS/SASO, follow the steps listed below unless your company has implemented different sign on procedures.

1. Access your online CA-IDMS/DC system.
2. At the CA-IDMS/DC system prompt, type the task code assigned to the CA-IDMS/SASO system and press the ENTER key. A task code is assigned at the time of installation. This entry displays the CA-IDMS/SASO Primary Menu screen shown in Exhibit 2.1.

### 2.1.2 CA-IDMS/SASO Security

If your company has implemented task, document, or chapter security, access into CA-IDMS/SASO is limited to the level of authority assigned to a user or group. The CA-IDMS/SASO securable components are:

- Task
- Document - Update or Browse
- Chapter - Update or Browse.

For more details on CA-IDMS/SASO security, see 2.31, “Document Utilities” on page 2-82, 2.3.3.1, “Structure Utilities” on page 2-10 and Chapter 4, “Operations” on page 4-1.



## 2.2 CA-IDMS/SASO Primary Menu Screen

The CA-IDMS/SASO Primary Menu screen provides CA-IDMS/SASO processing options, a field to select documents, a message field, copyright information, and system identifications.

Refer to CA-IDMS/SASO online documentation for detailed information on the CA-IDMS/SASO Primary Menu screen.

```

          CCCCCCCCC
        CCCCCCCCC
      CCC
      CCC      AAAA
      CCC      AAAAA
      CCC      AAAAAA
      CCC      AAA AAA
      CCC      AAA AAA
      CCAAACCCCC
      AAACCCCCCCC
      AAA      AAA
      AAA      AAA
      AAA      AAA
      AAA      AAA
OPTION =====
1 Browse      - Display Document Structure or Text
2 Edit        - Create or Change Text
3 Utilities   - Perform Structure Utility functions
4 Maintenance - Review or Apply Release Update Maintenance
D Document    - Perform Document Utility functions
T Tutorial    - Display Information about CA-IDMS/SASO
X Exit        - Exit from the CA-IDMS/SASO System

Specify full or partial "DOCUMENT" name below:
DOCUMENT NAME =====> (Blank for Document List)

Copyright (c) 1984, 1996 Computer Associates International, Inc.

```

*Exhibit 2.1: CA-IDMS/SASO Primary Menu Screen*

### 2.2.1 Document List Screen

To select a document from the Document List screen, place the cursor next to the document you want, type an **S** and press the ENTER key. If you selected an option at the Primary Menu, you will proceed to the function selected. If you did not, you are returned to the Primary Menu where you can select an option. Control then passes to the function selected.

```

          Standards Administration System Online
          Document Definitions

COMMAND =====> mm/dd/yy hh:mm
CA-IDMS/SASO Rnn.nn--- Document List -----

DOCUMENT NAME    DOCUMENT DESCRIPTION
ALTSPP           Alternate SP&G Document
SASODN01         Alternate Document (Undefined)
SASODN02         Alternate Document (Undefined)
SPG              STANDARDS, PROCEDURES, AND GUIDELINES
**END**

```

*Exhibit 2.2: Document List Screen*

## 2.3 CA-IDMS/SASO Options

The Primary CA-IDMS/SASO Menu provides the following options:

- Browse
- Edit
- Utilities
- Maintenance
- Document Utilities
- Tutorial
- Exit.

### 2.3.1 Browse Option

The Browse Option allows you to read the contents of a document. You can review the contents of a document by chapter, subject, or topic. This option does not allow you to update documents.

Specifications at the Browse Entry screen allow you to selectively display the contents of a document.

You have several browse entry options:

- You can display lists of subjects, topics, and topic keywords by entering index names
- You can display lists of subjects and topics and topic text by entering reference identifiers
- You can review the list of chapters contained in a document by leaving blank entries.

Once you are in a subject or topic list, you can also display a list of related subjects.

### 2.3.2 Edit Option

The Edit Option allows you to add, change, or delete document text using text editing commands and PF keys. CA-IDMS/SASO print control characters or print control characters that you define can also be inserted in document text. CA-IDMS/SASO print control characters highlight and underline words, create blank lines within the text, and control text indentation.

You can display text by specifying chapter, subject, and topic reference identifiers.

See 2.12, “Edit Option” on page 2-31 for details on the Edit Option.

### 2.3.3 Utilities Option

The Utilities Option allows you to define and organize chapters, subjects, and topics. The chapters, subjects, and topics of a document are referred to as structures. The structural components provide the framework for the text of documents.

The Utilities Option provides the following utilities:

#### Structure Utilities

- Assign Chapter Level Security
- Rename/Delete Structures
- Add/Insert Structures and Keywords
- Reorganize Structures
- Relate Subjects

#### Print Utilities

- Set Document Configurations for Print
- Set Printer Configurations
- Print

#### Change Utility

- Change Structure Statistics.

#### 2.3.3.1 Structure Utilities

The following is a description of the structure utilities:

- **SECURITY** - This utility allows you to assign CA-IDMS security to chapters contained in a document.
- **RENAME/DELETE** - This utility allows you to rename or delete a chapter, subject, or topic and topic keyword. To ensure against error when using the delete function, a warning screen is displayed, permitting you to confirm or cancel the deletion.
- **ADD/INSERT** - This utility permits you to add or insert a new chapter, subject, or topic and topic keyword. When a new chapter, subject, or topic is added, only the physical “structure” is created. Any text that is added to a newly created structure must be done using the Edit Option.
- **REORGANIZE** - This utility makes it possible to move a chapter, subject, or topic from one part of a document to another.
- **SUBJECT RELATOR** - This utility is used to associate or disassociate one subject with another.

### 2.3.3.2 Print Utilities

The following is a description of the print utilities:

- **DOCUMENT CONFIGURATION** - This utility enables you to plan the printed arrangement and layout of a document. Specifically, you can:
  - Define the titles to be printed and displayed in the screen headings
  - Specify chapter, subject, and topic highlighting options for the printed document
  - Determine the number of lines between topics.
- **PRINTER CONFIGURATION** - This utility allows you to:
  - Define or remove logical printers from the CA-IDMS/SASO system
  - Display a list of logical printers that are in use
  - Alter the hexadecimal initialization and control characters of a specific printer within a printer device verb list
  - Define printer-specific macros
  - Display and tailor the JCL associated with a specific printer to conform with your operating system and job accounting requirements.
- **PRINT** - This utility enables you to print an entire document or ranges of specific chapters, subjects, and topics. You can also specify whether the pages are to be printed single- or double-sided, the number of print lines per page, and the column number of the left-most margin.

For details on the Utilities Option, see 2.17, “Utilities Option” on page 2-38.

### 2.3.3.3 Change Utility

The following is a description of the Change utility:

**STATISTICS** - This utility enables you to change chapter, subject, or topic statistics. Statistics you can change include the date the structure was created, the date it was last revised, and who revised.

### 2.3.4 Maintenance Option

The Maintenance Option allows you to selectively create document enhancements and update a document with the enhancements you create.

You can use both batch and online utilities to create maintenance and updates.

You load document enhancements into the Maintenance Release area of your database by running batch programs or using the online utility functions supplied by CA-IDMS/SASO. You can then use the online Maintenance Option to review and selectively update your document with enhancements.

For additional details, see 2.22, “Maintenance Option” on page 2-60.

### 2.3.5 Document Utilities Option

The Document Utilities Option allows you to add and maintain documents, assign document security, and search a document for search strings. A document can be any document you define using these utilities. Some examples might include personnel or departmental guidelines. You may optionally define the Computer Associates-supplied Standards, Procedures and Guidelines (SP&G) manual to your CA-IDMS/SASO document control structure.

The Document Utilities Option provides the following utilities:

- Assign Document Security
- Rename/Delete Document
- Add Document
- Create Document Updates
- Add/Copy Document Configuration
- Add/Copy Printer Configuration
- String Search Facility.

The first three utilities (Assign Document Security, Rename/Delete Document, and Add Document) allow you to define a document to the CA-IDMS/SASO document control structure and assign document security classes for browse and update functions. They are called document definition utilities.

The Create Document Updates utility enables you to create document updates. This utility is called the Document Maintenance utility.

The copy functions (Add/Copy Document Configuration and Add/Copy Printer Configuration) enable you to copy document or printer configurations from one CA-IDMS/SASO database to another.

The last utility (String Search Facility) is called the Encyclopedia Function. This facility allows you to search an entire document for a specified search string.

For detailed information on the Document Utilities Option, see 2.27, “Document Utilities Option” on page 2-78.

#### 2.3.5.1 Document Definition Utilities

The following is a description of the document definition utilities:

- **SECURITY** - This utility allows you to assign CA-IDMS security to documents.
- **RENAME/DELETE** - This utility enables you to change or delete the name and description of a document in the CA-IDMS/SASO document control structure.

- **ADD** - This utility lets you define a document to the CA-IDMS/SASO document control structure. The information added to the control structure includes a document's name, and document description.

This utility does not establish the database for a document. The database that houses a document should be established before using this utility. You can add as many document names and descriptions as desired, but if the database has not been established, you cannot access them.

### 2.3.5.2 Document Maintenance

The following is a description of the maintenance utilities:

- **MAINTENANCE** - With this utility, you can create maintenance by comparing two documents at the chapter, subject, or topic level. CA-IDMS/SASO then stores any differences as equivalent maintenance in one of the selected documents.

You can also create maintenance within a single document. This option is considered a direct COPY of a chapter, subject, or topic from the permanent side of a document to the release maintenance side of the same document.

### 2.3.5.3 Copy Functions

The following is a description of the copy functions:

- **DOCUMENT CONFIGURATION** - This function allows you to apply the configurations specified for one document to another document.
- **PRINTER CONFIGURATION** - This utility allows you to copy the printer configurations set for one document to another document.

### 2.3.5.4 Encyclopedia Function

- **STRING SEARCH** - This facility allows you to search an entire document for all occurrences of a specified search string. The results from string matches located in a document are presented in the form of a topic list in Browse or Edit mode. You may then select topics from this list and review or change occurrences of the string found in topic text using editing commands.

### 2.3.6 Tutorial Option

The Tutorial Option provides online documentation about the features of CA-IDMS/SASO. You can view online documentation sequentially, or you can select topics from lists that are displayed on the online documentation pages.

See 2.32, "Tutorial Option" on page 2-94 for more information on the Tutorial Option.

### 2.3.7 Exit Option

When you select the Exit Option, the user profile is retained, all CA-IDMS/SASO operations are terminated, and CA-IDMS/SASO returns you to the CA-IDMS/DC entry screen.



## 2.4 CA-IDMS/SASO Structure Lists

Access to CA-IDMS/SASO document chapters, subjects, and topics for the purpose of performing CA-IDMS/SASO utilities is accomplished using CA-IDMS/SASO structure lists:

- Chapter List
- Subject List
- Topic List
- Subject List by Subject Name Index
- Topic List by Topic Name Index
- Topic List by Topic Keyword Index
- Related Subjects List.

**Note:** CA-IDMS/SASO enables you to access structure lists from the Browse, Edit, and most Structure Utility functions. To avoid unnecessary repetition, this section makes reference to Structure Lists as they relate to the Browse and Edit Options.

### 2.4.1 Chapter List Screen

The Chapter List screen provides a complete list of all chapters contained in a document.

This screen appears when no reference identifiers or index names are specified at the Browse Entry screen and you press the ENTER key.

You can use the STATS ON|OFF command to display statistics about the chapters.

The SORTORD command enables you to reorder lists in ascending or descending order.

The REFRESH command is also available to clear the Chapter List screen and redisplay chapters without line command or utility process codes and indicators.

Refer to CA-IDMS/SASO online documentation for descriptions and instructions for each field.

STANDARDS, PROCEDURES, AND GUIDELINES		
Computer Associates Intl., Inc.		
Release nn.nn		
COMMAND ==>		Browse
CA-IDMS/SASO Rnn.nn---	Chapter List -----	mm/dd/yy hh:mm
ID	CHAPTER NAME	
A	Appendices	
G	Glossary	
1	Introduction	
2	Standards For Systems Development	
3	Procedures for Systems Development	
4	Guidelines for Systems Development	
5	Standards For Database Administration	
6	Procedures For Database Administration	
7	Guidelines For Database Administration	
**END**		

*Exhibit 2.3: Chapter List Screen (Browse)*

## 2.4.2 Subject List Screen

The Subject List screen provides a complete list of all the subjects within a chapter.

A list of subjects appears when you either type a chapter ID at the Browse Entry screen or select a chapter at the Chapter List screen. After you type in the appropriate information and press the ENTER key, the Subject List screen appears. This screen provides a complete list of all subjects associated with the selected chapter.

You can use the STATS ON|OFF command to display statistics about the subjects.

The SORTORD command enables you to order the topic list by statistical information, topic names, keyword names, or topic reference identifiers.

You can also specify the REFRESH command to redisplay the Topic List without process indicators and utility Codes.

Refer to CA-IDMS/SASO online documentation for descriptions and instructions for each field.

```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc.
                                Release nn.nn
                                Browse
COMMAND ==>                                mm/dd/yy hh:mm
CA-IDMS/SASO Rnn.nn--- 3 Procedures for Systems Development -----
ID          SUBJECT NAME
3.1         DATABASE SYSTEM DEVELOPMENT PROCESS - OVERVIEW
3.2         SYSTEM INITIATION REVIEW PROCEDURE
3.3         LOGICAL DATABASE DESIGN REVIEW PROCEDURE
3.4         PHYSICAL DATABASE DESIGN REVIEW PROCEDURE
3.5         SYSTEM REVIEW PROCEDURE
3.6         TEST SYSTEM GENERATION PROCEDURE
3.7         IDMS APPLICATION MIGRATION - TEST TO PRODUCTION
3.8         TECHNICAL SUPPORT PROCEDURE
3.9         IDMS PROBLEM SOLVING CHECKLIST PROCEDURE
3.10        PROGRAM REVIEW (WALKTHROUGH) PROCEDURE
3.11        IDD INPUT REVIEW AND CONTROL PROCEDURE
3.12        CHANGES TO STANDARDS, PROCEDURES OR GUIDELINES
3.13        DEVIATION FROM STANDARDS, PROCEDURES OR GUIDELINES
**END**

```

*Exhibit 2.4: Subject List Screen (Browse)*

### 2.4.3 Topic List Screen

The Topic List screen provides a complete list of all topics and their associated keywords within a subject.

A list of topics appears when you type a chapter and subject ID at the Browse Entry screen and press the ENTER key, or when you select a subject at the Subject List, Subject List by Subject Name Index, or Related Subject List screens and press the ENTER key. The text of a topic can be displayed from the Topic List screen by selecting a topic and pressing the ENTER key.

You can use the STATS ON|OFF command to display statistics about the topics.

The SORTORD command enables you to order the topic list by statistical information, topic names, keyword names, or topic reference identifiers.

You can also specify the REFRESH command to redisplay the Topic List without process indicators and utility Codes.

Refer to CA-IDMS/SASO online documentation for descriptions and instructions for each field.

### 2.4.3.1 RELATORS Command

Entry of the RELATORS command displays a list of subjects related to the chapter and subject for which the topic list was displayed (Related Subjects List screen). Refer to CA-IDMS/SASO online documentation for a discussion of the RELATORS command.

STANDARDS, PROCEDURES, AND GUIDELINES		
Computer Associates Intl., Inc.		
Release nn.nn		
COMMAND ==>		Browse
CA-IDMS/SASO Rnn.nn---		mm/dd/yy hh:mm
2.1 Naming Conventions Standard -----		
ID	KEYWORD NAME	TOPIC NAME
2.1.0	Schema	Schema Name
2.1.1	DMCL	DMCL Name
2.1.2	Subschema	Subschema Name
2.1.3	USER	USER NAME
2.1.4	SYSTEM	SYSTEM NAME
2.1.5	ELEMENT	ELEMENT NAME
2.1.6	RECORD	IDMS RECORD NAME
2.1.7	RECORD	NON-IDMS RECORD NAME
2.1.8	RECORD	ADSO WORK, MAP, AND GLOBAL RECORD NAMES
2.1.9	LRF	LOGICAL RECORD
2.1.10	VIEW	VIEW ID NAME
2.1.11	SET	SET NAME
2.1.12	AREA	AREA NAME
2.1.13	BUFFER	BUFFER NAME
2.1.14	PROGRAM	PROGRAM NAME

*Exhibit 2.5: Topic List Screen (Browse)*

### 2.4.4 Subject List by Subject Name Index Screen

The Subject List by Subject Name Index screen provides a list of all subjects which have the same name index.

A list of subjects appears when you type a full or partial subject name and press the ENTER key at the Browse Entry screen.

You can use the STATS ON|OFF command to display statistics about the subjects.

The SORTORD command enables you to order the Subject List by statistical information, subject names, or by subject reference identifiers.

You can also specify the REFRESH command to redisplay the Subject List without process indicators and utility codes.

Refer to the online documentation for descriptions and instructions for each field.

```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc
                                Release nn.nn
                                Browse
                                mm/dd/yy hh:mm
COMMAND ===>
CA-IDMS/SASO Rnn.nn--- Subject List by Subject Name Index -----

```

ID	SUBJECT NAME
3.1	DATABASE SYSTEM DEVELOPMENT PROCESS - OVERVIEW
4.1	DATA MANAGEMENT PLANNING GUIDELINE
5.7	DATA DICTIONARY SECURITY STANDARD
5.10	DATABASE AND IDMS-CV BACKUP STANDARD

```

**END**

```

*Exhibit 2.6: Subject List by Subject Name Index Screen (Browse)*

## 2.4.5 Topic List by Topic Name Index Screen

The Topic List by Topic Name Index screen provides a list of all topics with the same name indexes contained in a document.

A list of topics appears when you type a full or partial topic name and press the ENTER key at the Browse Entry screen.

You can use the STATS ON|OFF command to display statistics about the topics.

The SORTORD command enables you to order the topic list by statistical information, topic names, keyword names, or topic reference identifiers.

You can also specify the REFRESH command to redisplay the Topic List without process indicators and utility codes.

Refer to the online documentation for descriptions and instructions for each field.

```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc
                                Release nn.nn
                                Browse
                                mm/dd/yy hh:mm
COMMAND ===>
CA-IDMS/SASO Rnn.nn--- Topic List by Topic Name Index -----

```

ID	KEYWORD NAME	TOPIC NAME
A.3.1	ADS/ONLINE	ADS/O FLOW WORKSHEET
A.3.2	ADS/ONLINE	ADS/O PROCESS WORKSHEET
A.3.3	ADS/ONLINE	ADS/O MAP SCREEN LAYOUT
A.3.4	ADS/ONLINE	ADS/O MAP ATTRIBUTE
A.3.21	ADS/ONLINE	ADS/O APPLICATION FUNCTION WORKSHEET
A.3.22	ADS/ONLINE	ADS/O APPLICATION RESPONSE WORKSHEET
A.4.1	ADS/ONLINE	ADS/O STRUCTURE DIAGRAM
A.4.7	ADS/ONLINE	ADS/O APPLICATION STRUCTURE DIAGRAM
2.1.8	RECORD	ADSO WORK, MAP, AND GLOBAL RECORD NAMES
2.6.12	ADS/ONLINE	ADS/O STRUCTURE
7.5.5	AREPORTS	ADSG AND ADSA DIALOG REPORTER AREPORTS

```

**END**

```

*Exhibit 2.7: Topic List by Topic Name Index Screen (Browse)*

## 2.4.6 Topic List by Topic Keyword Index Screen

The Topic List by Topic Keyword Index screen provides a list of all topic keywords contained in a document with the same keyword index. Topics and topic reference ID numbers associated with the keywords are also displayed.

A list of keywords appears when you type a full or partial keyword name and press the ENTER key at the Browse Entry screen.

You can use the STATS ON|OFF command to display statistics about the topics.

The SORTORD command enables you to order the topic list by statistical information, topic names, keyword names, or topic reference identifiers.

You can also specify the REFRESH command to redisplay the Topic List without process indicators and utility codes.

Refer to the online documentation for descriptions and instructions for each field.

STANDARDS, PROCEDURES, AND GUIDELINES		
Computer Associates Intl., Inc		
Release nn.nn		
COMMAND ==>		Browse
CA-IDMS/SASO Rnn.nn---		mm/dd/yy hh:mm
Topic List by Topic Keyword Index -----		
ID	KEYWORD NAME	TOPIC NAME
A.3.1	ADS/ONLINE	ADS/O FLOW WORKSHEET
A.3.2	ADS/ONLINE	ADS/O PROCESS WORKSHEET
A.3.3	ADS/ONLINE	ADS/O MAP SCREEN LAYOUT
A.3.4	ADS/ONLINE	ADS/O MAP ATTRIBUTE
A.3.6	ADS/ONLINE	SAMPLE ON-LINE SCREEN LAYOUT
A.3.21	ADS/ONLINE	ADS/O APPLICATION FUNCTION WORKSHEET
A.3.22	ADS/ONLINE	ADS/O APPLICATION RESPONSE WORKSHEET
A.4.1	ADS/ONLINE	ADS/O STRUCTURE DIAGRAM
A.4.7	ADS/ONLINE	ADS/O APPLICATION STRUCTURE DIAGRAM
2.1.21	ADS/ONLINE	APPLICATION NAME
2.6.1	ADS/ONLINE	GENERAL DIALOG NOTES
2.6.9	ADS/ONLINE	ERASING DATA ONLINE
2.6.10	ADS/ONLINE	EXTERNAL PICTURES
2.6.11	ADS/ONLINE	WORK RECORD USAGE
2.6.12	ADS/ONLINE	ADS/O STRUCTURE

*Exhibit 2.8: Topic List by Topic Keyword Index Screen (Browse)*

## 2.4.7 Related Subjects List Screen

The Related Subjects List screen displays a list of subjects related to the chapter and subject.

The Related Subjects List screen appears when you type the RELATORS command and press the ENTER key at the Topic List screen. It also appears when you select a subject with an **X** and press the ENTER key at the Subject List screen, Subject by Subject Name Index List screen, or at the Related Subject List screen itself.

You can also display related subjects from the Topic List by Topic Name Index screen and the Topic List by Topic Keyword Index List screen by specifying an **X** at the selected topic and pressing the ENTER key.

You can use the STATS ON|OFF command to display statistics about the subjects.

The SORTORD command enables you to order the Related Subjects List by statistical information.

You can also specify the REFRESH command to redisplay the Related Subjects List without process indicators and utility codes.

Refer to the online documentation for descriptions and instructions for each field.

STANDARDS, PROCEDURES, AND GUIDELINES	
Computer Associates Intl., Inc	
Release nn.nn	
COMMAND ===>	
CA-IDMS/SASO Rnn.nn--- 7.13 ASF GUIDELINES FOR THE DBA -----	
Browse mm/dd/yy hh:mm	
ID	RELATED SUBJECT NAME
2.1	Naming Conventions Standard Date Created: 07/08/90 Internal ID: 1 Last Revised: 09/24/91 16:34 Revised By: BRACA01 Maintenance - Applied Date: 00/00/00 Type: N/A Internal ID: Chapter/2
2.14	STANDARDS FOR USING THE AUTOMATIC SYSTEMS FACILITY Date Created: 07/08/90 Internal ID: 001 00001 Last Revised: 08/07/91 11:03 Revised By: CARROTS Maintenance - Applied Date: 00/00/00 Type: N/A Internal ID: Chapter/2
4.10	IDMS AND RELATED PRODUCTS OVERVIEW GUIDELINE Date Created: 01/01/84 Internal ID: 10 Last Revised: 07/12/91 17:07 Revised By: DEVDA02 Maintenance - Applied Date: 00/00/00 Type: N/A Internal ID: Chapter/4

*Exhibit 2.9: Related Subjects List Screen (Browse)*

## 2.5 Transfer Facility

CA-IDMS/SASO enables you to transfer between the major options of the system. An equal sign followed by a numeric string (=2. 0) transfers you to the system level function represented by the string.

This facility gives you the flexibility of moving between the major components of CA-IDMS/SASO without having to exit and reenter.

If your company has installed CA-IDMS/DC security on CA-IDMS/SASO tasks, this facility allows transfer only to those tasks for which you are authorized.

Refer to CA-IDMS/SASO online documentation for a discussion of the Equals (=) Command, system-level numeric strings, and the CA-IDMS/SASO Transfer Facility.



## 2.6 Signing Off CA-IDMS/SASO

You can exit CA-IDMS/SASO from the CA-IDMS/SASO Primary Menu screen or from one of the lower level screens.

To exit CA-IDMS/SASO from the CA-IDMS/SASO Primary Menu screen:

- Type an **X** for the Exit Option at the OPTION field and press the ENTER key.

To exit CA-IDMS/SASO from a lower level screen:

- Type an **=X** at the COMMAND field from any lower level screen and press the ENTER key.

## 2.7 Browse Option

This section takes a closer look at the Browse Option.

## 2.8 Purpose of Browse Option

The Browse Option enables you to access the contents of a document. Access to a document and specific sections of a document is determined by your security execution privileges. This option does not allow you to perform updates or make changes of any kind.

## 2.9 Browse Security

If task, document, or chapter security has been implemented at your company, your CA-IDMS/DC user ID used to sign on to the central version (CV) must have the following execution privileges for:

- The task category resource assigned to Browse Option tasks contained in your catalog. For more information on task security, see Chapter 4, “Operations” on page 4-1.
- The activity resource assigned for the document Browse function. For more information on assigning document security, see 2.27, “Document Utilities Option” on page 2-78.
- The activity resources assigned to chapters contained in a document for Browse access. For more information on chapter security, see 2.27, “Document Utilities Option” on page 2-78.

## 2.10 Accessing Document Text

Exhibit 2.10 shows you how to access the screens used in the Browse Option.

### 2.10.1 Direct Access

You can directly access topic text by typing specific chapter, subject, and topic reference ID numbers and pressing the ENTER key at the Browse Entry screen. After you have typed in these identifiers and pressed the ENTER key, the text of the topic (associated with the specified chapter, subject, and topic IDs) displays as the Topic Text screen.

### 2.10.2 Indirect Access

You can also access topic text from the Browse Entry screen through the Chapter List screen. The Chapter List screen appears when you press the ENTER key at the Browse Entry screen when all screen fields are specified with blanks. The Chapter List screen lists all of the chapters contained in a document. Selecting a chapter from this list displays the Subject List screen. The Subject List screen displays all subjects within the selected chapter. Choosing a subject from this list displays the Topic List screen which displays all topics within the selected subject. Selecting a topic from this list displays the associated text (Topic Text screen).

Use CA-IDMS/SASO commands to scroll (forward and backward) through chapter, subject, topic lists, and topic text displays of more than one page.

---

<b>Browse Screen</b>	<b>Invoked By:</b>
1. Primary SASO Menu Screen	Following the signon procedure.
2. Browse Entry Screen	Typing option 1 at screen 1.
3. Chapter List Screen	Pressing the ENTER key from any blank field at screen 2.
4. Subject List Screen	Typing a chapter ID at screen 2 or selecting a chapter at screen 3.
5. Topic List Screen	Typing a chapter and subject ID at screen 2 or selecting a subject at screen 4, 6, or 9.
6. Subject by Subject Name Index Screen	Typing a full or partial subject name at screen 2.
7. Topic List by Topic Name Index Screen	Typing a full or partial topic name at screen 2.
8. Topic List by Topic Keyword Index Screen	Typing a full or partial keyword name at screen 2.
9. Related Subjects List Screen	Typing the RELATORS command from screen 5; selecting a subject or topic, with an X from screens 4, 6, 7, 8, and 9.
10. Topic Text Screen	Typing chapter, subject, and topic IDs at screen 2; selecting a topic at screens 5, 7, or 8.

---

*Exhibit 2.10: Browse Option Screen Access.*

## 2.11 Screens

CA-IDMS/SASO provides screens, within each option, to accomplish several tasks.

The following are the screens you can access using the Browse Option:

- Browse Entry
- Chapter List
- Subject List
- Topic List
- Subject List by Subject Name Index
- Topic List by Topic Name Index
- Topic List by Topic Keyword Index
- Related Subjects List
- Browse Topic Text.

### 2.11.1 Browse Entry Screen

The Browse Entry screen appears when you type **1** for the Browse Option and press the ENTER key at the CA-IDMS/SASO Primary Menu screen.

Refer to the online documentation for detailed information on the Browse Entry screen.

```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc
                                Release nn.nn
                                Browse
                                mm/dd/yy hh:mm
COMMAND ===>
CA-IDMS/SASO Rnn.nn--- Browse Entry -----

STRUCTURE REFERENCE ID:
CHAPTER ===>                (Blank for Chapter List)
SUBJECT ===>                (Blank for Chapter/Subjects)
TOPIC   ===>                (Blank for Subject/Topics)

Specify full or partial "SUBJECT", "TOPIC", or "KEYWORD" name below:

SUBJECT BY SUBJECT NAME:
NAME ===>

TOPIC BY TOPIC NAME:
NAME ===>

TOPIC BY KEYWORD NAME(S):
NAME ===>                ===>                ===>

```

*Exhibit 2.11: Browse Entry Screen*

## 2.11.2 Browse Topic Text Screen

The Browse Topic Text screen displays the text of a selected topic. You cannot add, delete, or modify text at this level. You can only browse and scroll through topic text.

Information about the topic and topic text is displayed at this screen. You can remove information messages lines by entering the RESET or STATS OFF commands. This information can be redisplayed by entering the STATS ON command.

Refer to the online documentation for detailed information on the Browse Topic Text screen and the browse commands.

```
BROWSE -2.2.1                                COLUMNS 001 079
COMMAND ==>                                SCROLL ==> CSR
*** TOP OF DATA ***** CA-IDMS/SASO ***
SPG STANDARDS, PROCEDURES, AND GUIDELINES
2 Standards For Systems Development
2.2 Integrated Data Dictionary Usage Standard
2.2.1 SECURITY
Date Created: mm/dd/yy
Date Revised: mm/dd/yy hh:mm
Revised By   : CARROTS
Maintenance Applied Date: mm/dd/yy
Maintenance Applied Type: N/A
      IDD security is implemented via the DDDL SET OPTIONS SECURITY
      statement, the ADD/MOD USER . . . AUTHORITY statement and the
      USER. . . REGISTERED          and PUBLIC ACCESS clauses of the ADD/MOD
      Entity-type Entity-name statements. (Refer to the IDMSDDDL
      Reference Manual for DDDL syntax. Refer to this Standards
      manual IDMS Security Guideline, IDD Authorization Procedure,
      Data Dictionary Security Standard, and Multiple Dictionary
      Environment Standard for further explanation of the
      environment and use of the IDMS security facilities).

      The primary test dictionary contains all MIS users and only
      those end users needed for prototyping and production system.
```

*Exhibit 2.12: Browse Topic Text Screen*



## 2.12 Edit Option

This section takes a closer look at the function of the Edit Option. The Edit Option is used to add, modify, or delete text.

## 2.13 Purpose of Edit Option

The Edit Option allows authorized users to add, change, or delete topic text using editing commands and PF keys. With this option, you can implement print formatting options that let you print text using simple word processing commands. These commands allow you to control highlighting, line spacing, centering, indenting, headers, change notation, and page ejects.

## 2.14 Edit Security

Access to specific sections of a document is determined by your security authorization. If task, document, or chapter security has been implemented at your company, your CA-IDMS/DC user ID used to sign on to the central version (CV) requires the following execution privileges for:

- Edit option task category definitions contained in your catalog. For more information on task security, see Chapter 4, “Operations” on page 4-1.
- The activity resource assigned for the document Update function. For more information on document security, see 2.27, “Document Utilities Option” on page 2-78.
- Chapter Update activity resources. For more information on chapter security, see 2.27, “Document Utilities Option” on page 2-78.

## 2.15 Accessing Document Text

You can access topic text in the following ways:

- Direct Topic Access
- Indirect Topic Access.

Exhibit 2.13 shows how to access the screens used in the Edit Option.

### 2.15.1 Direct Access

Direct access into topic text can be achieved by typing specific chapter, subject, and topic reference ID numbers and pressing the ENTER key at the Edit Entry screen. See Exhibit 2.14.

After you have typed these identifiers and pressed the ENTER key, the text of the topic (associated with the specified chapter, subject, and topic) is displayed on the Topic Text screen.

### 2.15.2 Indirect Access

Entry into topic text can also be achieved from the Edit Entry screen by invoking the Chapter List screen. The Chapter List screen appears when you press the ENTER key from any blank field at the Edit Entry screen.

The Chapter List screen lists all of the chapters contained in a document. Selecting a chapter from this list displays the Subject List screen. This screen displays all of the subjects within the selected chapter. Selecting a subject from this list displays the Topic List screen. This screen displays all of the topics within the selected subject. Selecting a topic from this list then displays the associated text (Edit Text screen). Use CA-IDMS/SASO commands to scroll (forwards and backwards) through chapter, subject, topic lists, and topic text displays of more than one page.

<b>Edit Screen:</b>	<b>Invoked By:</b>
1. Primary SASO Menu Screen	Following the signon procedure.
2. Edit Entry Screen	Typing option 1 at screen 1.
3. Chapter List Screen	Pressing the ENTER key from any blank field at screen 2.
4. Subject List Screen	Typing a chapter ID at screen 2 or selecting a chapter at screen 3.
5. Topic List Screen	Typing a chapter and subject ID at screen 2 or selecting a subject at screen 4, 6, or 9.
6. Subject by Subject Name Index Screen	Typing a full or partial subject name at screen 2.
7. Topic List by Topic Name Index Screen	Typing a full or partial topic name at screen 2.
8. Topic List by Topic Keyword Index Screen	Typing a full or partial keyword name at screen 2.
9. Related Subjects List Screen	Typing the RELATORS command from screen 5; selecting a subject or topic, with an X from screens 4, 6, 7, 8, and 9.
10. Edit Screen	Typing chapter, subject, and topic IDs at screen 2; selecting a topic at screens 5, 7, or 8.

*Exhibit 2.13: Edit Option Screen Access*

## 2.16 Screens

The screens that are used to access topic text under the Edit Option replicate the ones under Browse. In fact, the only difference between the Browse and Edit Options is that Edit also allows you to modify text through editing commands.

The following are the screens you can access using the Edit Option:

- Edit Entry
- Chapter List
- Subject List
- Topic List
- Subject List by Subject Name Index
- Topic List by Topic Name Index
- Topic List by Topic Keyword Index
- Related Subjects List
- Edit Topic Text.

### 2.16.1 Edit Entry Screen

The Edit Entry screen appears when you select option **2** (the Edit Option) at the CA-IDMS/SASO Primary Menu screen.

Refer to the online documentation for detailed information on the Edit Entry screen.

```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc
                                Release nn.nn
                                Edit
COMMAND ===> mm/dd/yy hh:mm
CA-IDMS/SASO Rnn.nn--- Edit Entry -----

STRUCTURE REFERENCE ID:
CHAPTER ===> (Blank for Chapter List)
SUBJECT ===> (Blank for Chapter/Subjects)
TOPIC  ===> (Blank for Subject/Topics)

Specify full or partial "SUBJECT", "TOPIC", or "KEYWORD" name below:

SUBJECT BY SUBJECT NAME:
NAME ===>

TOPIC BY TOPIC NAME:
NAME ===>

TOPIC BY KEYWORD NAME(S):
NAME ===>          ===>          ===>
```

*Exhibit 2.14: Edit Entry Screen*

## 2.16.2 Edit Topic Text Screen

The Edit Topic Text screen displays the text of a selected topic. You can add, delete, or modify text at this level. You can also browse through topic text.

Information about the topic and topic text is displayed at this screen. You can remove information message lines by entering the RESET or STATS OFF command. This information can be redisplayed by entering the STATS ON command.

Refer to the online documentation for detailed information on the Edit Topic Text screen and the editing commands.

```

EDIT ---2.1.1                                COLUMNS 001 072
COMMAND ===>                                SCROLL ==> CSR
***** *** TOP OF DATA ***** CA-IDMS/SASO ***
==MSG> SPG STANDARDS, PROCEDURES, AND GUIDELINES
==MSG> 2 Standards For Systems Development
==MSG> 2.1 Naming Conventions Standard
==MSG> 2.1.1 DMCL Name
==MSG> Date Created: mm/dd/yy
==MSG> Date Revised: mm/dd/yy hh:mm
==MSG> Revised By   : BRACA01
==MSG> Maintenance Applied Date: mm/dd/yy
==MSG> Maintenance Applied Type: N/A
000010      1  DMCL naming is dependent upon your environment.
000011      2  If test and production are on different CVs,
000012      3  the same name can be used for the DMCLs.
000013      4  However, if test and production exist on the same CV,
000014      5  the following naming procedure should be followed.
000015      6
000016      7  Seven alphanumeric characters formatted as follows:
000017      8
000018      9              DMPCVnn for Production Central Version DMCLs.
000019     10              DMTxxnn for application oriented Test DMCLs.
000020     11
000021     12  Where possible, the sequence control number should match.

```

*Exhibit 2.15: Edit Topic Text Screen*

## 2.17 Utilities Option

This section takes a closer look at the Utilities Option.



## 2.18 Purpose of Utilities Option

The Utilities Option enables you to work on the definition and organization of a document and determine how the printed document looks. This option allows you to tailor a document to suit your own needs.

## 2.19 CA-IDMS/SASO Security

If task, document, or chapter security has been implemented at your company, your CA-IDMS/DC user ID used to sign on to the central version (CV) must have execution privileges for CA-IDMS/SASO Utility task resources, and resources assigned to documents and chapters.

For more information on security, see Chapter 4, “Operations” on page 4-1.

## 2.20 SASO Utilities Provided

CA-IDMS/SASO utilities are divided into the following categories:

### 2.20.1 Structure Utilities

- Assign Chapter Security
- Rename/Delete Structures
- Add/Insert Structures and Keywords
- Reorganize Structures
- Relate Subjects

### 2.20.2 Print Utilities

- Set Document Configurations for Print
- Set Printer Configurations
- Print

### 2.20.3 Change Utility

- Change Structure Statistics.

## 2.21 Utilities Menu

The Utilities Menu screen is invoked by entering option **3** from the CA-IDMS/SASO Primary Menu screen.

Refer to the online documentation for detailed information on the Utilities Menu screen.

```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc
                                Release nn.nn
                                Utilities
                                mm/dd/yy hh:mm
OPTION ==>
CA-IDMS/SASO Rnn.nn--- Utilities Menu -----
STRUCTURE UTILITIES:
  0 Security      - Assign Chapter Level CA-IDMS Security
  1 Rename/Delete - Rename or Delete Chapters, Subjects, Topics and Topic
                    Keywords
  2 Add/Insert    - Specify new Chapter, Subject, or Topic and Topic
                    Keyword Reference Identifiers and Names
  3 Reorganize    - Move Chapters, Subjects, or Topics
  4 Subject Relator - Specify or Unspecify Related Subjects
PRINT UTILITIES:
  5 Document Config - Set Document Configurations for Print
  6 Printer Config  - Set Printer Configurations
  7 Print           - Print entire manual or selected Structures/Indices
CHANGE UTILITY:
  8 Statistics      - Change Chapter, Subject, or Topic Dates Created, Dates
                    Revised, and User Identifiers

```

*Exhibit 2.16: Utilities Menu Screen*

### 2.21.1 Chapter Security

The Chapter Security utility gives you the ability to assign CA-IDMS/DC security resource activity numbers to chapters of any CA-IDMS/SASO document.

The Chapter Security screen is displayed when option **0** is entered at the Utilities Menu. To access a Chapter, Subject, or Topic List, see 2.7, “Browse Option” on page 2-24.

Once at the Chapter List for this utility, you can modify activity numbers by entering an **M** at the chapter to be modified, type the new activity number(s), and press the ENTER key.

When chapter security has been implemented, anyone requesting to browse or update that chapter must have execution privileges for that chapter.

**Note:** Only TASK and DOCUMENT UPDATE security apply to this utility. For more information on task and document security, see Chapter 4, “Operations” on page 4-1.

Refer to the online documentation for more information on Chapter Security.

```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc
                                Release nn.nn
                                Utilities
                                mm/dd/yy hh:mm
COMMAND ==>
CA-IDMS/SASO Rnn.nn--- Chapter Security -----
STRUCTURE REFERENCE ID:

CHAPTER ==> 2                (Blank for Chapter List)
SUBJECT ==> 1                (Blank for Chapter/Subjects)

* The following line commands may be specified in the structure lists:

S - Select structure for more detail or BROWSE Topic Text
X - Display Related Subjects List for a selected Subject/Topic
M - Modify Resource Activity Number in a Chapter List
```

Exhibit 2.17: Chapter Security Screen

2.21.2 Chapter Security Chapter List

The Chapter Security Chapter List screen is used to assign or modify activity numbers.

Refer to the online documentation for more information on the Chapter Security Chapter List screen.

```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc
                                Release nn.nn
                                Chapter Security
                                mm/dd/yy hh:mm
COMMAND ==>
CA-IDMS/SASO Rnn.nn--- Chapter List - Activity Number Assignment -----

ID          CHAPTER NAME          UPDATE/BROWSE

A           Appendices            000 000
G           Glossary              000 000
1           Introduction           000 000
2           Standards For Systems Development 000 000
3           Procedures for Systems Development 000 000
4           Guidelines for Systems Development 000 000
5           Standards For Database Administration 000 000
6           Procedures For Database Administration 000 000
7           Guidelines For Database Administration 000 000
**END**
```

Exhibit 2.18: Chapter Security Chapter List Screen

### 2.21.3 Rename/Delete Structure Utility

The Rename/Delete Structure utility enables you to rename or delete chapters, subjects, or topics and their associated keywords.

The Rename/Delete Structure screen is displayed by entering option **1** at the Utilities Menu.

Chapter, subject, and topic lists are accessed in the manner described in the Browse Option. Once at the selected list, you enter a line command (**R** for rename or **D** for delete) in the selection column to the left of the item on the list.

```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc
                                Release nn.nn
                                Utilities
                                mm/dd/yy hh:mm
COMMAND ==>
CA-IDMS/SASO Rnn.nn--- Rename/Delete Structure -----

STRUCTURE REFERENCE ID:
CHAPTER ==>                                (Blank for Chapter List)
SUBJECT ==>                                (Blank for Chapter/Subjects)

* The following line commands may be specified in the structure lists:
  S - Select structure for more detail or BROWSE Topic Text
  X - Display Related Subjects List for a selected Subject/Topic
  D - Delete a Chapter, Subject, or Topic
  R - Rename a Chapter, Subject, or Topic and Topic Keyword

```

*Exhibit 2.19: Rename/Delete Structure Screen*

### 2.21.4 Confirm Delete

When you delete a structure, the Confirm Delete screen appears enabling you to confirm or cancel the deletion. This screen serves two purposes:

- To indicate which levels of the structure will be deleted
- To guard against mistakes by giving you a chance to confirm or cancel the deletion.

Once a structure has been deleted, the IDs of any following numeric structures are compressed and renumbered.

When a structure is successfully renamed or deleted, an **\*R** or **\*D** appears to the right of the name of the structure. When a structure is deleted, no further utility functions can be requested for that structure.

```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc.
                                Release nn.nn
                                Delete
                                mm/dd/yy hh:mm
COMMAND ==>
CA-IDMS/SASO Rnn.nn--- Confirm Delete -----

*****
**                                     **
** WARNING: All Subjects, Topics and Topic Text associated with **
** the following Chapter description, will be erased.          **
**                                     **
**                                     **
** REFERENCE: 2 Standards For Systems Development             **
**                                     **
**                                     **
**                                     **
** INSTRUCTIONS: Press "ENTER" key to confirm DELETE request. **
** Enter "END" command to CANCEL DELETE request.              **
**                                     **
**                                     **
*****

```

*Exhibit 2.20: Confirm Delete Screen*

## 2.21.5 Add/Insert Structure Utility

The Add/Insert Structure utility allows you to add or insert new chapter, subject, and topic reference identifiers (IDs) and names. The specification of an ID is required, but the specification of a name or keyword is not.

Text cannot be added with this utility. You are establishing the structure to which text can later be added under the Edit Option or using batch utility functions.

If the specified chapter, subject, or topic level exists, a duplicate is inserted (added) and the existing structure and all following numeric structures are renumbered.

For more information on internal structure renumbering, see Chapter 4, “Operations” on page 4-1.

The Add/Insert Structure screen is displayed by entering option **2** at the Utilities Menu.

```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc
                                Release nn.nn
                                Utilities
                                mm/dd/yy hh:mm
COMMAND ==>
CA-IDMS/SASO Rnn.nn--- Add/Insert Structure -----

CHAPTER:
  ID   ==>
  NAME ==>

SUBJECT:
  ID   ==>
  NAME ==>

TOPIC:
  ID       ==>
  NAME     ==>
  KEYWORD  ==>
```

*Exhibit 2.21: Add/Insert Structure Screen*

## 2.21.6 Reorganize Structure Utility

The Reorganize Structure utility allows you to move a chapter, subject, or topic from one location in a CA-IDMS/SASO document to another.

Whenever a move takes place, an automatic renumbering of the effected numeric structures takes place. See Chapter 4, “Operations” on page 4-1 for more information on structure renumbering.

The Reorganize Structure screen is displayed by entering option **3** at the Utilities Menu.

The object of the move (the chapter, subject, or topic to be moved) is specified in the first set of reference identifiers on the screen. The destination of the move (where the object is to be moved) is specified in the second set of reference identifiers on the screen.

You must determine where to relocate a structure in a document using the relative position option. The BEFORE option places the object structure immediately before a specified structure. The AFTER option places the object structure immediately after a specified structure.

Relocation structure references must parallel the object structure references. For example, if a chapter ID is entered in the object field, then only a chapter ID can be entered in the relocation field. If chapter, subject, and topic IDs are entered, then chapter, subject, and topic IDs must be entered in relocation fields.



```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc
                                Release nn.nn
                                Utilities
                                mm/dd/yy hh:mm
COMMAND ==>
CA-IDMS/SASO Rnn.nn--- Reorganize Structure -----

Specify the "STRUCTURE REFERENCE ID" to be moved:
  STRUCTURE REFERENCE ID:
    CHAPTER ==>
    SUBJECT ==>
    TOPIC   ==>

Specify the "STRUCTURE REFERENCE ID" for relocation:
  STRUCTURE REFERENCE ID:
    CHAPTER ==>
    SUBJECT ==>
    TOPIC   ==>

Specify "RELATIVE POSITION" in the structure for placement:
  RELATIVE POSITION ==>      (B-Before, or A-After)

```

*Exhibit 2.22: Reorganize Structure Utility Screen*

## 2.21.7 Subject Relator Utility

The Subject Relator utility enables you to relate one subject to another. This utility also lets you delete the relationship between subjects.

The Subject Relator screen is displayed by entering option **4** at the Utilities Menu.

The first set of chapter ID and subject ID fields are used to access a chapter, subject, or topic list only. You cannot establish or delete a subject relationship from these fields.

The second set of chapter ID and subject ID fields are used when establishing a subject relationship. Relating a subject is accomplished by specifying the line command **R** in a lower level subject list. These fields appear in the upper right corner of a subject list display (if specified).

Refer to the online documentation for detailed information on the Subject Relator Utility screen.

```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc
                                Release nn.nn
                                Utilities
                                mm/dd/yy hh:mm
COMMAND ==>
CA-IDMS/SASO Rnn.nn--- Subject Relator -----

STRUCTURE REFERENCE ID:
CHAPTER ==>                                (Blank for Chapter List)
SUBJECT ==>                                (Blank for Chapter/Subjecs)

The following "SUBJECT RELATOR" reference is required for (R)elate functions.
SUBJECT RELATOR STRUCTURE REFERENCE ID:
CHAPTER ==>
SUBJECT ==>

* The following line commands may be specified in the structure lists:

S - Select structure for more detail or BROWSE Topic Text
X - Display Related Subjects List for a selected Subject/Topic
D - Delete a Subject from a Related Subjects List
R - Relate a Subject to "SUBJECT RELATOR" specified above

```

*Exhibit 2.23: Subject Relator Utility Screen*

### 2.21.7.1 Establishing and Deleting Subject Relationships

**To establish a subject relationship**, specify the chapter and subject of “subject relator structure reference ID fields”. Access the Subject List screen from the first set of chapter and subject “structure reference ID fields”, or by selecting a chapter at the Chapter List screen. Once a subject list has been accessed, type an **R** next to the item to be related and press the ENTER key. Once the ENTER key is pressed, the subject entered from the Subject Relator screen is related to the subject on the Subject List.

Once a relationship is established between subjects, the subject relationship can be displayed in the Related Subjects List screen.

**To delete a subject relationship**, access the Related Subjects List screen (again, from the first set of chapter and subject “structure reference ID fields”), type a **D** at the line for deletion, and press the ENTER key. Once the ENTER key is pressed, the subject relationship is deleted.

## 2.21.8 Document Configuration Utility

The Document Configuration utility enables you to:

- Define the titles to be printed in a document and in the screen headings
- Define copyright date(s) to be printed in the hardcopy version of a document
- Specify chapter, subject, and topic highlighting and underlining options for the printed document
- Determine topic line spacing.

Information about the Document Configuration is displayed in the bottom portion of the screen. The date the Configuration was added to a document and the date/time stamp of the last change are shown.

The Document Configuration Utility screen is displayed by entering option **5** at the Utilities Menu.

Refer to the online documentation for detailed information on the Document Configuration Utility screen.

```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc
                                Release nn.nn
                                Utilities
                                mm/dd/yy hh:mm
COMMAND ==>
CA-IDMS/SASO Rnn.nn--- Document Configuration -----
DOCUMENT VARIABLES:
COMPANY NAME ==> Computer Associates Intl., Inc
DIVISION NAME ==> Release nn.nn
COPYRIGHT DATE ==> yyyy
CHAPTER REFERENCES:
  BOLDING      ==> Y      (Y/N)
  UNDERLINING ==> N      (Y/N)
SUBJECT REFERENCES:
  BOLDING      ==> Y      (Y/N)
  UNDERLINING ==> N      (Y/N)
TOPIC REFERENCES:
  BOLDING      ==> Y      (Y/N)
  UNDERLINING ==> N      (Y/N)
  LINE SPACING ==> 01    (0-9)
DOCUMENT STATISTICS:
  DATE CREATED   : mm/dd/yy
  DATE LAST REVISED: mm/dd/yy hh:mm
  LAST REVISED BY : BRACA01

```

*Exhibit 2.24: Document Configuration Screen*

## 2.21.9 Printer Configuration Utility

The Printer Configuration utility enables you to add, delete, or modify a logical device. You can also implement printer-specific print macros/verbs that are defined by the user and imbedded in topic text so that you can implement print functions unique to your environment.

The Printer Configuration screen is displayed by entering option **6** at the Utilities Menu.

Screens access for the Printer Configuration utility is shown in Exhibit 2.26.

Refer to the online documentation for detailed information on the Printer Configuration Utility screen.

```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc
                                Release nn.nn
                                Utilities
                                mm/dd/yy hh:mm

OPTION ==>
CA-IDMS/SASO Rnn.nn--- Printer Configuration -----
A      - Add a new Printer Device
M      - Modify a Printer Device
D      - Delete a Printer Device
J      - Display/Maintenance JCL for "PRINTER DEVICE"
O      - Display/Maintenance OCL Command List for "PRINTER DEVICE"
I      - Display Information about a Printer Device
BLANK - Display/Maintenance Directives in a Printer Device List

PRINTER DEVICE:
DEVICE      ==> IMPACT
DESCRIPTION ==> Impact Printer Prototype
LINES PER PAGE ==> 66

* The following line commands may be specified in the OCL/Printer Device List:
M - Modify Printer Devices or OCL Commands
D - Delete Printer Devices or OCL Commands
J - Select a Printer Device for JCL review or maintenance
O - Select a Printer Device for OCL review or maintenance
I - Display Information about a Printer Device or OCL

```

*Exhibit 2.25: Printer Configuration Utility Screen*

<b>Edit Screen</b>	<b>Invoked by:</b>
1. Primary SASO Menu Screen	Following the signon procedure.
2. Utilities Menu Screen	Typing option 3 at screen 1.
3. Printer Configuration Screen	Typing option 6 at screen 2.
4. Printer Configuration List Screen	Pressing the ENTER key at screen 3.
5. Printer Information Screen	Entering option I and a device at screen 3; selecting a device with an I at screen 4.
6. Printer Device JCL Screen	Entering option J and a device at screen 3; selecting a device with a J at screen 4.
7. OCL Commands List Screen	Entering option O and a device at screen 3; selecting a device with an O at screen 4.
8. Add Print Control Directive Screen	Entering option Y in the ADD NEW VERB field at screen 7.
9. OCL Printer Information Screen	Entering option I next to a printer verb at screen 7.

*Exhibit 2.26: Printer Configuration Screen Access*

## 2.21.10 Printer Configuration List

The Printer Configuration List screen displays a list of printers and the number of lines to be printed on a page for the printer device. From this list, you can modify or delete a printer, display the JCL for a specific printer, display the hexadecimal initialization and control characters (OCL) for a printer, or display information about a printer.

The Printer Configuration List screen is displayed by pressing the ENTER key, without an accompanying entry, at the Printer Configuration screen.

Refer to the online documentation for detailed information on the Printer Configuration List screen.

STANDARDS, PROCEDURES, AND GUIDELINES		
Computer Associates Intl., Inc		
Release nn.nn		
COMMAND ==>		Printer Config
CA-IDMS/SASO Rnn.nn---		mm/dd/yy hh:mm
Printer Configuration List -----		
PRINTER DEVICE	PRINTER DESCRIPTION	LINES PER PAGE
TAPE	OUTPUT TO TAPE	64
DISK	OUTPUT TO DASD	64
LASER	3820	64
IMPACT	Impact Printer Prototype	66
IMPACTD	Impact Printer Prototype	66
IMPACTG	Impact Printer Prototype	66
3800	IBM Laser Substation	64
6670	IBM Laser Image	60
**END**		

*Exhibit 2.27: Printer Configuration List Screen*

## 2.21.11 Printer Information

The Printer Information screen displays information about a printer device. Information includes the date created, the date and time of the last modification, and the user ID responsible for the last modification.

You can display the Printer Information screen by entering option **I** together with a printer device name at the Printer Configuration screen. You can also access this screen by entering line command **I** next to a printer device at the Printer Configuration List screen.

For more information on change update tracking, see Chapter 4, “Operations” on page 4-1.

Refer to the online documentation for detailed information on the Printer Information screen.

```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc
                                Release nn.nn
                                Printer Config
                                mm/dd/yy hh:mm

COMMAND ==>
CA-IDMS/SASO Rnn.nn--- Printer Information -----

PRINTER DEVICE:  6670      IBM Laser Image

DATE CREATED:  06/01/85
DATE REVISED: 00/00/00
REVISED BY:

```

*Exhibit 2.28: Printer Information Screen*

## 2.21.12 Printer Device JCL

The Printer Device JCL utility enables you to display and edit the JCL of the selected device. Editing commands can be used to tailor the JCL to conform with your operating system and job accounting requirements.

The Printer Device JCL Utility screen is displayed by specifying the **J** option and a device at the Printer Configuration screen. It can also be displayed by selecting a device with line command **J** from the Printer Configuration List screen.

Refer to the online documentation for detailed information on the Printer Device JCL Utility screen and the editing commands.

```

EDIT ---6670      OSJCL                                COLUMNS 001 072
COMMAND ==>                                SCROLL ==> CSR
***** ** TOP OF DATA ***** CA-IDMS/SASO ***
000001 //STEP0001 EXEC PGM=ESSBPRNT
000002 //STEPLIB DD DISP=SHR,DSN=your. dbms. loadlib
000003 // DD DISP=SHR,DSN=your. idms. loadlib
000004 //SYSCTL DD DISP=SHR,DSN=your. idms. sysctl
000005 //*TRANSIENT WORK FOR ENFORCER INTERFACE
000006 //WORKFIL DD DISP=(,DELETE,DELETE),DSN=your. work. file,
000007 // UNIT=SYSDA,SPACE=(CYL,(1,1))
000008 //MANUAL DD SYSOUT=&CLASS,COPIES=&COPIES,DCB=RECFM=FBA
000009 //AUDIT DD SYSOUT=&CLASS
000010 //SYSUDUMP DD SYSOUT=*
000011 //SYSIPT DD *
000012 ,END
000013 3 OUTPUT 163
000014 2 OUTPUT 193
000015 1 OUTPUT 087
000016 ,PROGRAMMED STOP LIST
000017 FUNCTION
000018 ,DEF
000019 TYP 087 163 087 193
000020 LAST 62 0
000021 FIRST 5

```

*Exhibit 2.29: Printer Device JCL Utility Screen*

### 2.21.13 OCL Commands List

The Optical Character Language (OCL) Commands List utility enables you to display and change hexadecimal setup commands and print control verbs (macros) defined for a printer device.

This utility allows you to define or alter the printer initialization and control characters for the specified device. You can also add new printer control verbs and their associated hexadecimal commands by entering option **Y** in the **ADD NEW VERB** field. CA-IDMS/SASO responds by displaying the Add Print Control Directive screen.

This utility also allows you to modify a verb's hexadecimal control character set and description by entering line command **M** at the verb for modification and pressing ENTER. Printer macros defined by you can be deleted by entering the **D** line command at the line for deletion. Printer macros supplied by Computer Associates for the 6670 printer device cannot be deleted.

The Optical Character Language (OCL) Commands screen is displayed by entering option **O** and the corresponding printer device at the Printer Configuration screen. It can also be displayed by selecting a device with line command **O** at the Printer Configuration List screen.

Refer to the online documentation for detailed information on the OCL Commands screen.

```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc
                                Release nn.nn
                                Printer Config
                                mm/dd/yy hh:mm

COMMAND ==>
CA-IDMS/SASO Rnn.nn--- OCL Commands For 6670 -----

PRINTER INITIALIZATION:          (In Hexadecimal)

ADD A NEW VERB ==> N              (Y=yes, N=no)
VERB  HEX CONTROL CHARACTER(S)  VERB DESCRIPTION
E      6BC6C5C5C4                (E)ject - Force a page break
      2FF361                     Change Font to "BOLD"
@      5FE6                      Change Font to "UNDERLINE"
Norml 2FF161                     Change Font to "NORMAL"
Dlimt 1E                        Originate/Terminate Line
Bfont 2FF261                     6670 BOX Font Outline
Tab    5FE3                      Word Processing Tab
CR     5FC3                      Carriage Return
*END*
```

*Exhibit 2.30: OCL Commands Screen*

## 2.21.14 Add Print Control Directive

The Add Print Control Directive utility gives you the ability to add a new print control verb and associated hexadecimal commands (print macros) to the set of OCL commands.

You can access the Add Print Control Directive screen by entering option **Y** in the ADD A NEW VERB field at the OCL Commands List screen.

Refer to the online documentation for detailed information on the Add Print Control Directive screen.

STANDARDS, PROCEDURES, AND GUIDELINES		
Computer Associates Intl., Inc		
Release nn.nn		Printer Config
COMMAND ==>		mm/dd/yy hh:mm
CA-IDMS/SASO Rnn.nn--- Add Print Control Directive -----		
DOCUMENT NAME : SPG		
PRINTER DEVICE: 6670		
PRINT CONTROL DIRECTIVE:		
PRINT CONTROL VERB	==>	
HEX CONTROL CHARACTER(S)	==>	
VERB DESCRIPTION	==>	

*Exhibit 2.31: Add Print Control Directive Screen*

## 2.21.15 OCL Printer Information

The OCL Printer Information screen provides information about a print control verb, its associated printer device, and printer initialization string.

You can display the OCL Printer Information screen by entering an **I** next to a printer verb at the OCL Commands screen.

Information displayed includes the date a printer device, printer initialization, and the print macro were created and last revised. The user ID of the user responsible for last changing any one of these three components is also displayed.

Refer to the online documentation for detailed information on the OCL Printer Information screen.



```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc
                                Release nn.nn
                                Printer Config
                                mm/dd/yy hh:mm

COMMAND ==>
CA-IDMS/SASO Rnn.nn--- Printer/OCL Information -----

PRINTER DEVICE: 6670      IBM Laser Image
DATE CREATED:  mm/dd/yy
DATE REVISED: mm/dd/yy
REVISED BY:

PRINTER INITIALIZATION:

DATE CREATED:
DATE REVISED:
REVISED BY:

VERB: E      6BC6C5C5C4      (E)ject - Force a page break
DATE CREATED: mm/dd/yy
DATE REVISED: mm/dd/yy  hh:mm
REVISED BY:
```

*Exhibit 2.23: OCL Printer Information Screen*

## 2.21.16 Print Request

The Print Request screen is displayed by entering option **7** at the Utilities Menu.

The Print Request utility enables you to print an entire document and ranges of or specific chapters, subjects, or topics. You can optionally direct print output to TAPE or DISK. This facility is important to those who need a current hardcopy version or those who are more comfortable with printed text.

4.2, “Printer Characteristics” on page 4-5 provides more information on printer control and output. Chapter 4, “Operations” on page 4-1 also describes new security considerations for USER ID and PASSWORD in CA-IDMS/SASO security.

Refer to the online documentation for detailed information on the Print Request screen.

See Exhibit 2.34 for an example of the printed output.

```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc
                                Release nn.nn
                                Utilities
                                mm/dd/yy hh:mm
OPTION ==>
CA-IDMS/SASO Rnn.nn--- Print Request -----

P - Selectively Print Reference specifications  PA - Print Entire Manual
PR - Print Ranges of Reference specifications  B - Browse Topic Text

DOCUMENT NAME:                USER INFORMATION:
NAME ==> SPG                  ID ==> VTAMLT05  PASSWORD ==>
STRUCTURE REFERENCE ID:      STRUCTURE INDICES:
CHAPTER ==>                   DETAILED TABLE OF CONTENTS ==> Y (Y/N)
SUBJECT ==>                   TOPIC KEYWORD CROSS REFERENCE ==> Y (Y/N)
TOPIC ==> 1                   CASE MODE:
RANGE ==> 000                 MIXED/UPPER CASE ==> M (M/U)
PRINT OPTIONS:               FORMS OPTIONS:
DEVICE TYPE ==> IMPACT        DOUBLE SIDED (2-UP) ==> N (Y/N)
PRINT CLASS ==> A             FORMS CONTROL ==>
NUMBER OF COPIES ==> 01      LINES PER PAGE ==> 66
JOB CARD(S): (1-3 LINES)     PRINT COLUMN-BEGIN ==> 01
//SASOPRNT JOB (USER,ACCT),CLASS=A,MSGCLASS=R
//*
//*
```

*Exhibit 2.33: Print Request Screen*

```

. ....
Computer Associates International, Inc. : Subject:      2.1
FIRST Alternate Document              : Date Created: mm/dd/yy
PRODUCT DEVELOPMENT                   : Date Revised: mm/dd/yy
. ....

SUBJECT: NAMING CONVENTIONS STANDARD

RELATED SUBJECTS:

STANDARD ELEMENT DESIGNATORS
STANDARD ABBREVIATIONS                      A.2
STANDARDS, PROCEDURES, AND GUIDELINES MANUAL 1.1
INTEGRATED DATA DICTIONARY USAGE STANDARD  2.2
COBOL PROGRAMMING STANDARD                  2.3
CA-IDMS/DB PROGRAMMING STANDARD             2.4
CA-IDMS/DC PROGRAMMING (COBOL) STANDARD     2.5
ADS/ONLINE PROGRAMMING STANDARD             2.6
JOB CONTROL LANGUAGE (JCL) OS/VS STANDARD   2.10
MULTIPLE DICTIONARY ENVIRONMENT STANDARD    2.11
DATABASE SYSTEM DEVELOPMENT PROCESS - OVERVIEW 3.12
PHYSICAL DATABASE DESIGN REVIEW PROCEDURE    3.14
INTEGRATED DATA DICTIONARY OVERVIEW GUIDELINE 4.14
CA-IDD AS AN ANALYSIS AND DEVELOPMENT TOOL GUIDELINE 4.7
PROTOTYPING AND ADS/ONLINE GUIDELINE        4.14
RECORD ATTRIBUTES STANDARD                  5.1
SET ATTRIBUTES STANDARD                     5.2
AREA ATTRIBUTES STANDARD                    5.3
SCHEMA ATTRIBUTES STANDARD                  5.4
DMCL ATTRIBUTES STANDARD                    5.5
SUBSCHEMA ATTRIBUTES STANDARD               5.6
BACHMAN DIAGRAM STANDARD                    5.11
CA-IDD CONTENT REVIEW PROCEDURE              6.5
ASF GUIDELINES FOR THE DBA                  7.14
SUBJECT 1 -- with multiple topics for testing 8.1
A                                             9.1

2. 1. 1          SCHEMA NAME--TEST RENAME

Seven alphanumeric characters formatted as follows:

SrPnnnn for Production global schemas.
SrPxxnn for Production application oriented schemas.
SrTnnnn for Test global schemas.
SrTxnnn for Test application oriented schemas.

Examples: SCP0002 is the Global Production schema.

SCTAR02 is the Accounts Receivable test schema.

SCTAR01 is the Accounts Receivable test schema.

. ....
Copyright Computer Associates International, Inc. 1984-1996          2. 1-1

```

*Exhibit 2.34: CA-IDMS/SASO Printed Output Example*

## 2.21.17 Change Structure Statistics

The Change Structure Statistics Utility screen is displayed by entering option **8** at the Utilities Menu.

The Change Structure Statistics utility enables you to change structure statistics once a chapter, subject, or topic list is displayed.

Chapter, subject or topic statistics which may be altered include date created, date last revised, and revised by user ID. Selecting a structure for change function is done by

entering the line command **C** (C-Change) at the structure for utility function. See 2.21.18, “Update Assignment” on page 2-58 for more information.

Refer to the online documentation for detailed information on the Change Structure Statistics Utility screen.

STANDARDS, PROCEDURES, AND GUIDELINES  
Computer Associates Intl., Inc  
Release nn.nn

Utilities  
mm/dd/yy hh:mm

COMMAND ==>  
CA-IDMS/SASO Rnn.nn--- Change Structure Statistics -----

STRUCTURE REFERENCE ID:  
CHAPTER ==> (Blank for Chapter List)  
SUBJECT ==> (Blank for Chapter/Subjects)

\* The following line commands may be specified in the structure lists:

- S - Select structure for more detail or BROWSE Topic Text
- X - Display Related Subjects List for a selected Subject/Topic
- C - Select Chapter, Subject, or Topic for Change function

*Exhibit 2.35: Change Structure Statistics Utility Entry Screen*

## 2.21.18 Update Assignment

The Update Assignment screen is displayed by selecting a structure for change with a **C** line command at a Chapter, Subject, or Topic List screen.

Use the Update Assignment screen to change structure statistics and determine whether the change is to be made to all lower-level structures, if applicable.

Refer to the online documentation for detailed information on the Update Assignment screen.

```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc
                                Release nn.nn
                                Change
                                mm/dd/yy hh:mm
COMMAND ==>
CA-IDMS/SASO Rnn.nn--- Update Assignment -----
Modification of statistics has been requested for the following structure:
  2 Standards For Systems Development
INSTRUCTIONS:
Enter "END" command to CANCEL CHANGE request.
Specify "CHANGE" information below and press "ENTER" key.
Specify whether the change should be made to lower level structures:
Change Entire Structure Group? ==> N          (Y=yes, N=no)
Change Control Tracking Data:
DATE CREATED ==> mm / dd / yy          (MM/DD/YY)
DATE REVISED ==> mm / dd / yy          (MM/DD/YY)
REVISED BY   ==> BRACA01              (8 CHARACTER ID)
```

*Exhibit 2.36: Update Assignment Screen*

## **2.22 Maintenance Option**

This section takes a closer look at the Maintenance Option.

## 2.23 Purpose of Maintenance Option

The Maintenance Option enables you to selectively create, review, and apply document enhancements. You can create document updates by using CA-IDMS/SASO batch or online utility functions. Enhancements created are loaded into the maintenance area of your database. Once a document update or a set of document updates is contained on your database, you can then review and optionally apply the enhancements you want to permanently incorporate into your document.

You can also migrate enhancements or a set of enhancements from one central version (CV) to another, or from one document to another document contained in the same CV. Off-loading and uploading maintenance is accomplished using batch utilities ESSMOFF and ESSMLOD.

This option also allows you to confirm or cancel requests to apply maintenance, and purge or delete maintenance from your database. A confirmation screen is displayed, permitting you to proceed with the request or cancel it.

The online Maintenance Option also provides statistical information about updates in the Release Maintenance List, the Chapter, Subject, and Topic Lists and in topic text displays. Informational displays include dates enhancements were created and uploaded into your database, dates and user IDs representing last activity within a maintenance release, and internal chapter, subject, and topic reference identifiers. Internal IDs are used to compare and match enhancements with structures contained in the document. For more information on internal IDs, see Chapter 4, "Operations" on page 4-1.

## 2.24 Maintenance Security

The only levels of security applicable to this option are TASK and DOCUMENT UPDATE. Therefore, if your company has implemented CA-IDMS/SASO task or document security, your CA-IDMS/DC user ID used to sign on to the CV must have execution privileges for:

- Maintenance Option task resources contained in your catalog. See Chapter 4, “Operations” on page 4-1 for more details on CA-IDMS/SASO task security.
- DOCUMENT UPDATE activity. See 2.27, “Document Utilities Option” on page 2-78 for additional information on document security.

Chapter update authority is implied with access into this function.



## 2.25 Creating Maintenance

Document updates that you have created, using option **D.3** of Document Utilities, can be offloaded by running the batch job ESSMOFF. In addition, these updates can be reviewed and selectively applied using the online functions of the Maintenance Option.

Document enhancements can also be generated by running the batch job ESSRLSE. See Chapter 3, “Batch Utilities” on page 3-1 for explanations and examples of batch jobs.

### 2.25.1 Off-loading Maintenance

The batch job, ESSMOFF, produces a printed report showing a summary of your enhancements (CA-IDMS/SASO Maintenance Release Summary Report). This report also includes a printed facsimile of Maintenance Release enhancement(s). Information (including examples) regarding this report can be found in Chapter 3, “Batch Utilities” on page 3-1.

Once the maintenance has been offloaded to a file, the enhancements can be loaded into the maintenance area by running the batch job ESSMLOD.

### 2.25.2 Uploading Maintenance

The batch job ESSMLOD checks the text of the enhancements against corresponding text on the database on a line-by-line basis. The results of this batch job are the Release Maintenance Discrepancies Report and the installed release maintenance.

The Release Maintenance Discrepancies Report lists any differences between the contents of the enhancement and corresponding text and structures (chapters, subjects, topics) on your database. Chapter, subject, and topic internal IDs are used to locate and match enhancements to structures contained on the primary side of your document.

This report enables you to track and compare:

- Movement of structures (chapter, subjects, or topics)
- Deleted structures
- Existing structures
- Altered chapter, subject, and topic external reference IDs
- Altered chapter, subject, topic, and keyword names
- Your text with the corresponding enhancement text.

The Release Maintenance Discrepancies Report is an important element in the update process. This report should be reviewed thoroughly before continuing with the application of maintenance.

### 2.25.3 Enhancement Structure

Once the maintenance release has been loaded into the maintenance area of the database, the online functions of the Maintenance Option are used to review and selectively apply the enhancements.

An enhancement can be in the form of an entire chapter, a series of subjects, or an individual topic. The actual content of all enhancements is topic text.

Enhancements can be applied at the release level or at a chapter, subject, or topic level. Where the enhancement is applied depends upon its level. For example, you would not apply an entire chapter at the topic list, but at the chapter list. Individual topics are applied at the topic list.

## 2.26 Screens

The Maintenance Option provides a series of screens where enhancements can be applied, deleted, or even modified. Accessing these screens is similar to the Browse Option. See Exhibit 2.37.

An initial entry screen lists all enhancements that can be applied to a document. At this screen, an enhancement can be applied, selected for review, deleted, or permanently removed from the database using the PURGE command. If selected, you can move down the chain of Chapter, Subject, and Topic List screens and apply the enhancement at the desired structure level.

The last screen in the chain is a Topic Text screen. Here you can modify the text of the enhancement, with editing commands, before applying it.

Browse Screen	Invoked by:
1. Primary SASO Menu Screen	Following the signon procedure.
2. Release Maintenance List Screen	Selecting option 4 at screen 1.
3. Chapter List Screen	Selecting a release with an S from screen 2.
4. Subject List Screen	Selecting a chapter with an S from screen 3.
5. Topic List Screen	Selecting a subject with an S from screen 4.
6. Related Subjects List Screen	Typing the RELATORS command from screen 5; selecting a subject with an X from screen 4.
7. Topic Text Screen	Selecting a topic with an S from screen 5.

*Exhibit 2.37: Maintenance Option Screen Access*

### 2.26.1 Release Maintenance List

The Release Maintenance List provides information about enhancements. It displays the release ID, the date each enhancement was created, the dates and USERID of last activity in the enhancement, and the status of the enhancement.

This screen is invoked by entering the Maintenance Option **4** from the CA-IDMS/SASO Primary Menu screen.

Refer to the online documentation for detailed information on the Release Maintenance screen.

STANDARDS, PROCEDURES, AND GUIDELINES						
Computer Associates Intl., Inc						
Release nn.nn						
						Maintenance
						mm/dd/yy hh:mm
COMMAND ==>						
CA-IDMS/SASO Rnn.nn--- Release Maintenance List -----						
RELEASE ID	DATE CREATED	DATE UPLOADED	LAST ACTIVITY	USERID	STATUS	
CJ0814911	mm/dd/yy	mm/dd/yy	mm/dd/yy hh:mm			
TEST08/19	mm/dd/yy	mm/dd/yy	mm/dd/yy hh:mm	BRACA01	*Applied	
**END**						

*Exhibit 2.38: Release Maintenance List Screen*

### 2.26.1.1 Release Chapter List

The Release Chapter List screen provides a list of chapters contained in the maintenance release. This screen is invoked by selecting a release from the Release Maintenance List screen using the **S** line command.

Discrepancies detected between the primary side of the document and release maintenance chapters are also displayed on this screen. Chapters contained in the document's primary side are displayed when a variance is detected. When the maintenance chapter does not have an equivalent in the primary side, the **NO EQUIVALENT** is displayed below that chapter enhancement. Variant chapters are created when the external reference ID has been altered using utility functions or the name of the chapter has been changed.

Enhancement chapters that have **NO EQUIVALENT** in the primary side of the document are created when the chapter has been deleted from the document. The chapter internal ID is used to find a match with chapter internal IDs contained in the primary side of the database.

The **REFRESH** command redisplay the chapter list without function process codes.

Internal IDs and other important information about enhancement chapters and variant chapters can be displayed by entering the **STATS ON/OFF** command at the command line of this display. Information displayed includes creation dates, revision date time stamps, user IDs responsible for revisions, and internal IDs. Variant chapters are displayed with information about previous enhancements applied.

When **NO EQUIVALENT** is displayed, internal IDs can be reviewed in both sides of the database to resolve the discrepancy by entering the **STATS** command at any chapter list.

For more information on internal IDs, see Chapter 4, "Operations" on page 4-1.

```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc
                                Release nn.nn
                                ID-CJ0814911
                                mm/dd/yy hh:mm
COMMAND ==>
CA-IDMS/SASO Rnn.nn--- Release Chapter List -----
ID          CHAPTER NAME          TYPE
2           Standards For Systems Development      R
**END**

```

*Exhibit 2.39: Release Chapter List Screen (Maintenance)*

### 2.26.1.2 Release Maintenance Subject List

The Subject List screen provides a list of subjects within a chapter of the enhancement that resides on the maintenance side of the database. This screen is invoked by selecting a chapter with an **S** at the Release Chapter List screen.

Discrepancies detected between the primary side of the document and release maintenance side are also displayed on this screen. Subjects contained in the document's primary side are displayed when a variance is detected. When the maintenance subject does not have an equivalent in the primary side, the NO EQUIVALENT is displayed below that subject enhancement. Variant subjects are created when the external reference ID has been altered using utility functions or the name of the subject has been changed.

Enhancement subjects that have NO EQUIVALENT in the primary side of the document are created when the subject has been deleted from the document. The chapter and subject internal IDs are used to find a match with chapter and subject internal IDs contained in the primary side of the database.

The REFRESH command redisplay the subject list without function process codes.

Internal IDs and other important information about enhancement subjects and variant subjects can be displayed by entering the STATS ON|OFF command at the command line of this display. Information displayed includes creation dates, revision date time stamps, user IDs responsible for revisions, and internal IDs. Variant subjects are displayed with information about previous enhancements applied.

When NO EQUIVALENT is displayed, internal IDs can be reviewed in both sides of the database to resolve the discrepancy by entering the STATS command at any subject list.

For more information on internal IDs, see Chapter 4, "Operations" on page 4-1.

STANDARDS, PROCEDURES, AND GUIDELINES		
Computer Associates Intl., Inc		
Release nn.nn		
COMMAND ==>		ID-CJ0814911
CA-IDMS/SASO Rnn.nn--- 2 Standards For Systems Development -----		mm/dd/yy hh:mm
ID	SUBJECT NAME	TYPE
2.1	Naming Conventions Standard	R
2.2	Integrated Data Dictionary Usage Standard	R
2.3	COBOL Programming Standard	R
2.4	IDMS-DB Programming Standard	R
2.5	IDMS-DC Programming (COBOL) Standard	R
2.6	ADS/ONLINE PROGRAMMING STANDARD	R
2.7	CULPRIT PROGRAMMING STANDARD	R
2.8	ONLINE CRT SCREEN DESIGN STANDARD	R
2.9	PRINTED REPORT DESIGN STANDARD	R
2.10	JOB CONTROL LANGUAGE (JCL) OS/VS STANDARD	R
2.11	MULTIPLE DICTIONARY/CV ENVIRONMENT STANDARD	R
2.12	PROGRAM SPECIFICATION STANDARD	R
2.13	ADS/ONLINE APPLICATION (ADS/A) STANDARD	R
2.14	STANDARDS FOR USING THE AUTOMATIC SYSTEMS FACILITY	R
**END**		

*Exhibit 2.40: Release Maintenance Subject List Screen*

### 2.26.1.3 Release Maintenance Topic List

The Topic List screen provides a list of topics within a subject in the enhancement that resides on the maintenance side of the database. This screen is invoked by selecting a subject with an **S** at the Release Maintenance Subject List screen.

Discrepancies detected between the primary side of the document and release maintenance side are also displayed on this screen. Topics contained in the document's primary side are displayed when a variance is detected. When the maintenance topic does not have an equivalent in the primary side, the NO EQUIVALENT is displayed below that topic enhancement. Variant topics are created when the external reference ID has been altered using utility functions or the name of the topic has been changed.

Enhancement topics that have NO EQUIVALENT in the primary side of the document are created when the topic has been deleted from the document. The chapter, subject, and topic internal IDs are used to find a match with chapter, subject, and topic internal IDs contained in the primary side of the database.

The REFRESH command redisplay the topic list without function process codes.

Internal IDs and other important information about enhancement topics and variant topics can be displayed by entering the STATS ON|OFF command at the command line of this display. Information displayed includes creation dates, revision date time stamps, user IDs responsible for revisions, and internal IDs. Variant topics are displayed with information about previous enhancements applied.

When NO EQUIVALENT is displayed, internal IDs can be reviewed in both sides of the database to resolve the discrepancy by entering the STATS command at any topic list.

For more information on internal IDs, see Chapter 4, “Operations” on page 4-1.

STANDARDS, PROCEDURES, AND GUIDELINES			
Computer Associates Intl., Inc			
Release nn.nn			
COMMAND ==>			ID-CJ0814911
CA-IDMS/SASO Rnn.nn---			mm/dd/yy hh:mm
2.1 Naming Conventions Standard -----			
ID	KEYWORD	TOPIC NAME	TYPE
2.1.0	Overview	Subject Overview	R
NO EQUIVLNT			*
2.1.1	Schema	Schema Name	R
2.1.0	Schema	Schema Name	*
2.1.2	DMCL	DMCL Name	R
2.1.1	DMCL	DMCL Name	*
2.1.3	Subschema	Subschema Name	R
2.1.2	Subschema	Subschema Name	*
2.1.4	USER	USER NAME	R
2.1.3	USER	USER NAME	*
2.1.5	SYSTEM	SYSTEM NAME	R
2.1.4	SYSTEM	SYSTEM NAME	*
2.1.6	ELEMENT	ELEMENT NAME	R
2.1.5	ELEMENT	ELEMENT NAME	*
2.1.7	RECORD	IDMS RECORD NAME	R
2.1.6	RECORD	IDMS RECORD NAME	*
2.1.8	RECORD	NON-IDMS RECORD NAME	R

*Exhibit 2.41: Release Maintenance Topic List Screen*

#### 2.26.1.4 Release Maintenance Related Subjects List

The Related Subjects List screen displays subject relationships between the enhancement subject and the primary side of the source document from which the enhancement was created.

This screen appears after entering the RELATORS command at the Maintenance Topic List screen or after typing an **X** in the selection column of a subject list.

No additional information or functions are available from this display.

STANDARDS, PROCEDURES, AND GUIDELINES		
Computer Associates Intl., Inc		
Release nn.nn		
COMMAND ==>		Maintenance
CA-IDMS/SASO Rnn.nn---		mm/dd/yy hh:mm
2.1 Naming Conventions Standard -----		
ID	RELATED SUBJECT NAME	
A.1	STANDARD ELEMENT DESIGNATORS	
A.2	STANDARD ABBREVIATIONS	
2.2	Integrated Data Dictionary Usage Standard	
2.3	COBOL Programming Standard	
2.4	IDMS-DB Programming Standard	
2.5	IDMS-DC Programming (COBOL) Standard	
2.6	ADS/ONLINE PROGRAMMING STANDARD	
2.10	JOB CONTROL LANGUAGE (JCL) OS/VS STANDARD	
2.11	MULTIPLE DICTIONARY/CV ENVIRONMENT STANDARD	
3.1	DATABASE SYSTEM DEVELOPMENT PROCESS - OVERVIEW	
3.4	PHYSICAL DATABASE DESIGN REVIEW PROCEDURE	
4.4	INTEGRATED DATA DICTIONARY OVERVIEW GUIDELINE	
4.7	IDD AS AN ANALYSIS AND DEVELOPMENT TOOL GUIDELIN E	
4.14	PROTOTYPING AND ADS/ONLINE GUIDELINE	
5.1	RECORD ATTRIBUTES STANDARD	
5.2	SET ATTRIBUTES STANDARD	
5.3	AREA ATTRIBUTES STANDARD	

*Exhibit 2.42: Related Subjects List Screen (Maintenance)*

## 2.26.2 Release Maintenance Topic Text

The Topic Text screen displays the text of the selected topic from the Release Maintenance Topic List screen. From this screen, you can copy text from another topic residing on the primary or the release maintenance side of the document's database, or you can modify the text using text editing commands. Thus, the text of the selected topic enhancement can be modified before applying it to a document.

Any modifications to the text are retained in the maintenance area of the database until you choose to apply, delete, or purge the enhancement containing the modified topic text.

Information about the topic and topic text is displayed at this screen. You can remove information message lines by entering the RESET or STATS OFF commands. This information can be redisplayed by entering the STATS ON command.

Refer to the online documentation for detailed information on the Topic Text screen and Edit or Browse commands.



```

EDIT ---2.1.0                                COLUMNS 001 072
COMMAND ==>                                SCROLL ==> CSR
***** ** TOP OF DATA ***** CA-IDMS/SASO ***
000001 PURPOSE:      To establish standard naming formats for all database and
000002                  conventional system components.
000003
000004 SCOPE:         These naming conventions apply to all IDMS and
000005                  conventional file based application development.
000006
000007 DOCUMENTATION
000008 REQUIREMENTS:    All components listed in this standard must be entered
000009                  into the IDD using the unique names formulated as
000010                  explained herein. The minimum requirements for each of
000011                  these components are Name, Description, and System
000012                  Identifier(s). See the IDD Usage Standard for detailed
000013                  documentation requirements. Hardcopy documentation is
000014                  produced by running various IDD reports.
000015
000016                  The only exceptions are DDnames, Path Status, ASF
000017                  generated names, and outside vendor supplied utilities
000018                  and application software packages.
000019 :E
000020 OVERVIEW:
000021

```

*Exhibit 2.43: Topic Text Screen (Maintenance)*

### 2.26.3 Release Maintenance Update Assignment

The Update Assignment screen enables you to specify a target structure for the issued enhancement or to cancel the apply request.

This screen appears when you select to apply an enhancement to a structure that cannot be located in the primary database. In such a case, the enhancement has no equivalent structure in a document.

When a structure cannot be located for the apply function, this screen provides you with two options to contain the application:

- One option allows you to specify an existing structure in the primary database to which you want to assign the enhancement
- The second option allows you to add the missing structure (chapter and subject for topic, chapter for subject, and chapter for update assignment).

Refer to the online documentation for detailed information on the Update Assignment screen.

```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc
                                Release nn.nn
                                ID-XXXXXXXX
                                mm/dd/yy hh:mm

OPTION ==>
CA-IDMS/SASO Rnn.nn--- Update Assignment -----

The following maintenance has NO EQUIVALENT in the STANDARDS:
  2.1.0 Subject Overview

INSTRUCTIONS:
  Enter "END" to CANCEL APPLY request.
  Enter assignment "REFERENCE ID" below and press "ENTER" key.
  NOTE: To ADD the NON-EQUIVALENT entity, press "ENTER" without
        changing the structure reference(s).
  STRUCTURE REFERENCE ID:
    CHAPTER ==> 2
    SUBJECT ==> 1
    TOPIC   ==> 0
```

*Exhibit 2.44: Update Assignment Screen (Maintenance)*

## 2.26.4 Release Maintenance Confirm Apply

Whenever you choose to apply an enhancement, CA-IDMS/SASO responds by displaying the Confirm Apply screen. This screen serves two purposes:

- To warn you existing structures are either replaced or deleted by the enhancement
- To guard against mistakes by giving you a chance to either proceed with or cancel the application.

Once you proceed with the application, all existing text within the selected structure is overlaid with the new enhancement.

If the maintenance involves the deletion of a structure from a document, the Confirm Delete screen is also displayed. This display insures that nothing is removed from the document without confirmation.

```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc
                                Release nn.nn
                                Apply
COMMAND ==>                                mm/dd/yy hh:mm
CA-IDMS/SASO Rnn.nn--- Confirm Apply -----

*****
**                                     **
**  WARNING: All Topics and Topic Text contained in the following  **
**                Subject Release will replace existing structures.  **
**                                     **
**                                     **
**  REFERENCE: 2.1Naming Conventions Standard                      **
**                                     **
**                                     **
**                                     **
**                                     **
**  INSTRUCTIONS: Press "ENTER" key to confirm APPLY request.      **
**                Enter "END" command to CANCEL APPLY request.      **
**                                     **
**                                     **
*****

```

*Exhibit 2.45: Confirm Apply Screen (Maintenance)*

## 2.26.5 Release Maintenance Confirm Delete

Whenever you choose to logically delete an enhancement by entering option **D** next to a maintenance structure, CA-IDMS/SASO displays the Confirm Delete screen. This screen serves two purposes:

- To warn you the maintenance is logically deleted from the Maintenance List
- To guard against mistakes by giving you a chance to either proceed with or cancel the delete.

```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc
                                Release nn.nn
                                Delete
COMMAND ==>                                mm/dd/yy hh:mm
CA-IDMS/SASO Rnn.nn--- Confirm Delete -----

*****
**                                     **
**  WARNING: All Chapters, Subjects, and Topics associated with      **
**          the following Release Maintenance will be erased.        **
**                                     **
**                                     **
**                                     **
**  REFERENCE: CJ0814911                                           **
**                                     **
**                                     **
**                                     **
**  INSTRUCTIONS: Press "ENTER" key to confirm DELETE request.      **
**                  Enter "END" command to CANCEL DELETE request.    **
**                                     **
**                                     **
*****

```

*Exhibit 2.46: Confirm Delete Screen (Maintenance)*

## 2.26.6 Release Maintenance Confirm Purge

Whenever you choose to purge an enhancement by entering the PURGE *release-id*/ALL command, CA-IDMS/SASO displays the Confirm Purge screen. This screen serves two purposes:

- To warn you the maintenance is physically and permanently purged from the Maintenance List and the CA-IDMS/SASO database
- To guard against mistakes by giving you a chance to either proceed with or cancel the purge.

Refer to the online documentation for detailed information on the Confirm Purge screen and the PURGE command.

```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc
                                Release nn.nn
                                Purge
COMMAND ==>                                09/30/91 16:10
CA-IDMS/SASO Rnn.nn--- Confirm Purge -----

*****
**                                     **
**  WARNING: The following Release Maintenance will be erased.  **
**                                     **
**                                     **
**                                     **
**                                     **
**  REFERENCE: SPyymnnnn                                     **
**                                     **
**                                     **
**                                     **
**                                     **
**  INSTRUCTIONS: Press "ENTER" key to confirm DELETE request.  **
**                    Enter "END" command to CANCEL DELETE request.  **
**                                     **
**                                     **
*****

```

*Exhibit 2.47: Confirm Purge Screen (Maintenance)*

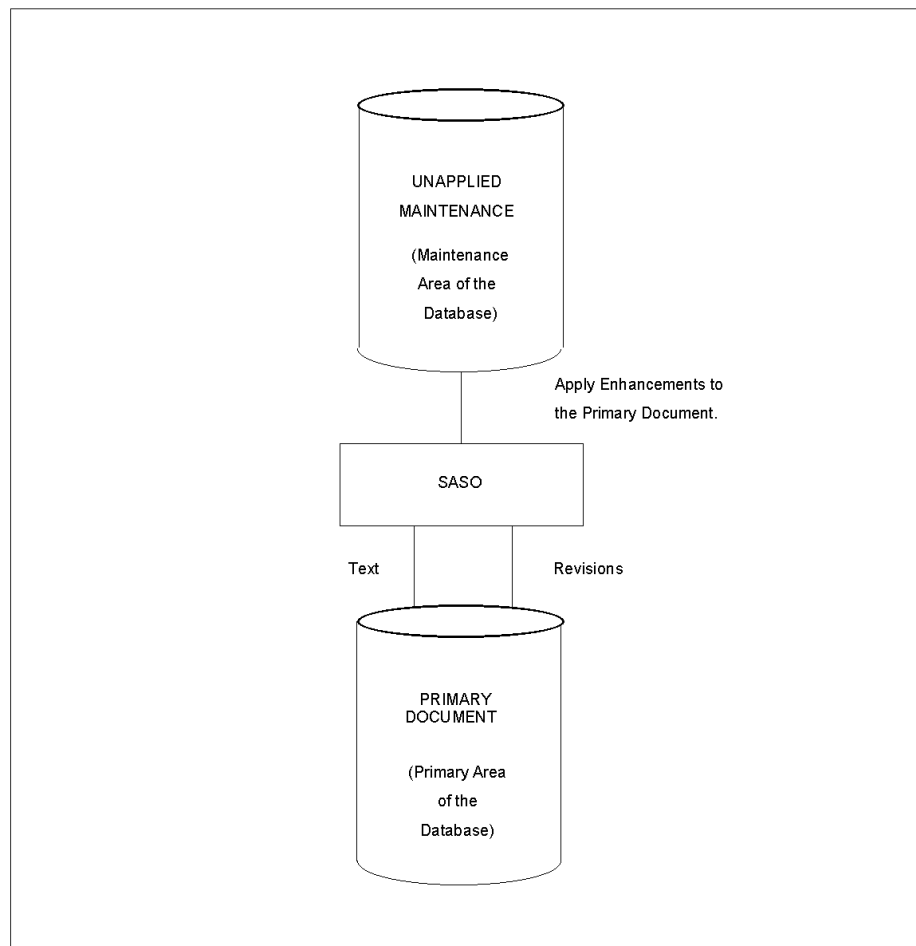
## 2.26.7 Online Review and Application

Once the maintenance release has been loaded into the maintenance area of the database, the online functions of the Maintenance Option are used to review and selectively apply the enhancements. See Exhibit 2.48 for a conceptual view of this process.

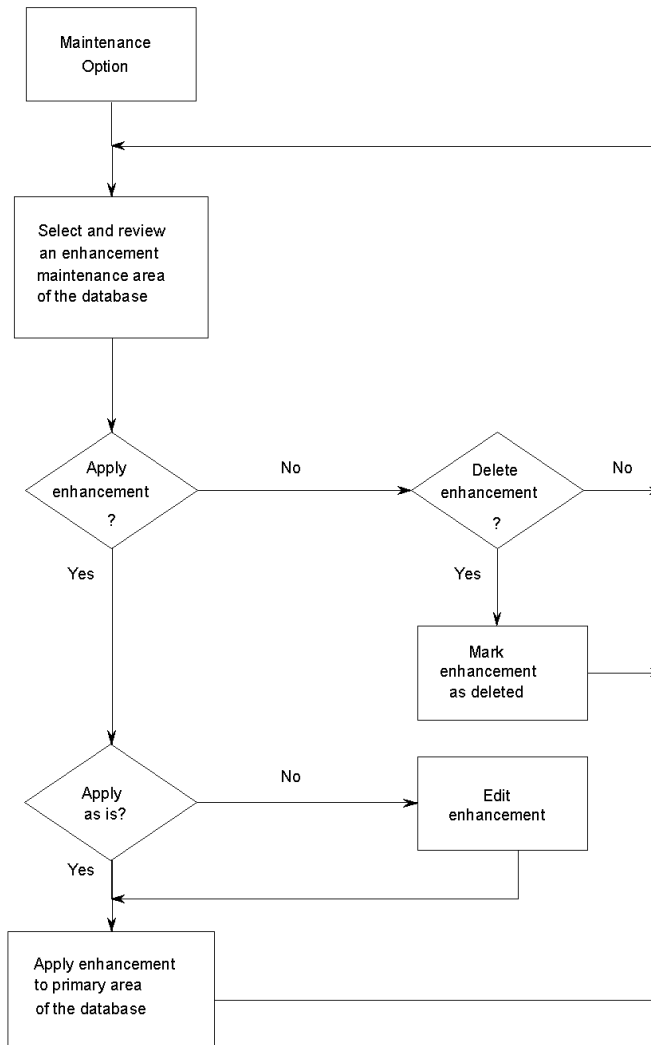
There are several ways to apply enhancements using the online functions:

- Apply the enhancement exactly as is. When an enhancement is applied, the current sections are overlaid on the primary side of the database for REPLACE types. For INSERT types, the enhancement is inserted into the current sections of the permanent document and existing external ID is altered to maintain the contiguous numbering scheme.
- Alter the textual contents of a maintenance topic with the editing commands and then apply them.
- Make alterations, to the text on the primary side of the database, based upon the Discrepancies Report and then delete or purge the maintenance. This process is referred to as a “logical application” because the text in the maintenance area does not overlay the text in the primary area.
- Copy text into the primary side, from the maintenance area, using the COPY editing command, then delete or purge the maintenance (logical application).
- Delete the enhancements and do not apply them.
- Permanently remove the enhancement from the maintenance side of the database using the PURGE command.

See Exhibit 2.49 for a conceptual flowchart of the online enhancement process.



*Exhibit 2.48: Database Load and Application Process*



*Exhibit 2.49: Online Enhancement Application Process*

## **2.27 Document Utilities Option**

This section takes a closer look at the Document Utilities Option.



## 2.28 Purpose of Document Utilities Option

The Document Utilities Option allows you to add and maintain documents on the CA-IDMS/SASO document control structure and perform utility functions on any CA-IDMS/SASO document. Some examples might include personnel or departmental guidelines.

Before you can perform the utility operations described in this section, you must add a database to CA-IDMS/SASO that houses the document. See Appendix A, “Adding Multiple CA-IDMS/SASO Documents” on page A-1 for details on how to perform this task.

After the CA-IDMS/SASO database has been defined, you can use the utilities described in this section to add and maintain a document.

## 2.29 CA-IDMS/SASO Security

If task security has been implemented at your company, your CA-IDMS/DC user ID used at signon must have access privilege to Document Utility task resources contained in your catalog. For more information on assigning security to individual CA-IDMS/SASO tasks, see Chapter 4, “Operations” on page 4-1.

After establishing your CA-IDMS/SASO database and adding a document to CA-IDMS/SASO, you can add security to the document using the Document Security utility described in this section. Once document security is established, you also need chapter authorization to utilize the Encyclopedia Function described in this section.

## 2.30 Document Utilities Provided

CA-IDMS/SASO provides the following types of Document Utilities:

- **Definition Utilities**

- Allow you to define, rename, delete, or assign security to documents

- **Document Maintenance Utilities**

- Allow you to create document updates by comparing documents or copying structures within a document

- **Copy Functions**

- Allow you to copy document and printer configurations

- **Encyclopedia Function**

- Allows you to search documents for a string of alphanumeric characters.

## 2.31 Document Utilities

The Document Utilities screen is invoked by entering option **D** from the CA-IDMS/SASO Primary Menu.

Refer to the online documentation for detailed information on the Document Utilities screen.

```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc
                                Release nn.nn
                                Document Utilities
                                mm/dd/yy hh:mm
OPTION ==>
CA-IDMS/SASO Rnn.nn--- Document Utilities Menu -----
DEFINITION UTILITIES:
  0 Security      - Assign Document Level CA-IDMS Security
  1 Rename/Delete - Rename or Delete Document Definitions
  2 Add           - Define Documents
DOCUMENT MAINTENANCE:
  3 Maintenance  - Create Document Updates by comparing Documents or
                  by copying Structures within a Document
COPY FUNCTIONS:
  4 Document Config - Add/Copy Document Configurations
  5 Printer Config  - Add/Copy Printer Configurations
ENCYCLOPEDIA FUNCTIONS:
  6 String Search  - Search Documents for Strings

```

*Exhibit 2.50: Document Utilities Screen*

### 2.31.1 Document Security Document List

The Document Security utility enables you to assign a CA-IDMS/DC security resource activity numbers to any CA-IDMS/SASO document.

You can access this utility by entering option **0** from the Document Utilities Menu.

Once at this Document List, you can modify activity numbers by entering an **M** at the document to be modified, enter an activity number for update, browse or both, and press the ENTER key.

When document security has been implemented, any user requesting to browse or update that document must have access privilege for the Browse or Update activity resource contained in your system catalog.

**Note:** Only TASK security applies to this utility. For more information on task security, see Chapter 4, “Operations” on page 4-1.

Refer to the online documentation for detailed information on the Document Security screen.

Standards Administration System Online		Document Utilities	
Document Security		mm/dd/yy hh:mm	
COMMAND ==>			
CA-IDMS/SASO Rnn.nn--- Document List - Activity Number Assignment -----			
DOCUMENT NAME	DOCUMENT DESCRIPTION	UPDATE/BROWSE	
ALTSPG	Alternate SP&G Document	010	010
SASODN01	Alternate Document (Undefined)	000	000
SASODN02	Alternate Document (Undefined)	000	000
SPG	STANDARDS, PROCEDURES, AND GUIDELINES	005	005
**END**			

*Exhibit 2.51: Document Security Document List Screen*

## 2.31.2 Rename/Delete Document Utility

The Rename/Delete Document screen provides a complete list of all documents residing in the CA-IDMS/SASO document control structure. This utility is displayed by entering option **1** at the Document Utilities Menu.

This function enables you to change or delete the name and description of a document. The only document that cannot be changed or deleted at this screen is the document currently being accessed and the default document that was established at product installation.

The rename and delete functions do not affect database structures. To rename a document, place an **R** next to the document to be renamed, enter the new name(s), and press the ENTER key. Document name changes must match a database name contained in your catalog.

To delete a document, place a **D** next to the document to be deleted and press ENTER. Once a document has been deleted, it cannot be reaccessed unless it is “readded” using the Add Document utility. Before a document is deleted, you must respond to the Confirm Delete screen. This screen enables you to confirm or cancel the deletion.

Refer to the online documentation for detailed information on the Rename/Delete Document screen.

```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc
                                Release nn.nn
                                Document Utilities
                                mm/dd/yy hh:mm
COMMAND ==>
CA-IDMS/SASO Rnn.nn--- Rename/Delete Document -----

DOCUMENT NAME      DOCUMENT DESCRIPTION
ALTSPP             Alternate SP&G Document
SASODN01           Alternate Document
SASODN02           Alternate Document
SPG               STANDARDS, PROCEDURES, AND GUIDELINES
**END**

```

*Exhibit 2.52: Rename/Delete Document Screen*

### 2.31.3 Confirm Document Delete

Whenever you choose to delete a document by entering option **D** at the Rename/Delete Document screen, CA-IDMS/SASO responds by displaying the Confirm Document Delete screen. This screen serves two purposes:

- To warn you the document is logically be deleted from the CA-IDMS/SASO document control structure
- To guard against mistakes by giving you a chance to either proceed with or cancel the delete.

```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc
                                Release nn.nn
                                Document Delete
                                mm/dd/yy hh:mm
COMMAND ==>
CA-IDMS/SASO Rnn.nn--- Confirm Document Delete -----

*****
**                                     **
**  WARNING: The Document definition associated with the          **
**               following Document description will be erased    **
**               from the SASO system.                            **
**                                     **
**  DOCUMENT: SASODN02 Alternate Document (Undefined)           **
**                                     **
**                                     **
**                                     **
**  INSTRUCTIONS: Press "ENTER" key to confirm DELETE request.   **
**               Enter "END" command to CANCEL DELETE request.   **
**                                     **
**                                     **
*****

```

*Exhibit 2.53: Confirm Document Delete Screen*

### 2.31.4 Add Document Utility

The Add Document utility enables you to define a document to the CA-IDMS/SASO system by creating control information for the document. This control information includes the name and description of the document. The Add Document utility is displayed by entering option **2** at the Document Utilities Menu.

The Add Document utility does not establish the physical or logical components of a database. These components must be established before you use the Document Add utility. Read Appendix A, “Adding Multiple CA-IDMS/SASO Documents” on page A-1 for details.

After these components have been established for a document, the Add Document utility can be used to create control information for a document. When control information has been created, you can incorporate a structure (chapters, subjects, topics) by one of the following methods:

- Executing the batch utility, ESSULOD, which uploads a downloaded structure into the document's database
- Utilizing the Utilities and Edit Options to establish chapter, subject, and topic structures and create text for topics
- Adding chapter, subject, and topic structures and uploading topic text using the batch utility ESSTEXT
- Applying document updates created using the batch utility ESSRLSE, or using the Create Document Updates utility (D. 3).

Refer to the online documentation for detailed information on the Add Document screen.

STANDARDS, PROCEDURES, AND GUIDELINES  
 Computer Associates Intl., Inc  
 Release nn.nn

Document Utilities  
 mm/dd/yy hh:mm

COMMAND ==>  
 CA-IDMS/SASO Rnn.nn--- Add Document -----

DOCUMENT NAME:  
 NAME ==>

DOCUMENT DESCRIPTION:  
 DESCRIPTION ==>

*Exhibit 2.54: Add Document Screen*

### 2.31.5 Create Document Updates Utility

With the Create Document Updates utility, you can create a set of document updates (release maintenance) for an entire document, chapter, subject or topic (and topic text).

This utility is used when you have updated a document using existing online facilities and want to apply these changes to another document.

**Note:** If this utility is performed at the document level, severe loading of the journal files may occur. Therefore, we strongly recommend that this utility never be run at the document level, and consideration given to using this utility at the chapter, subject, and/or topic level only. The batch utility version for this function is described under the Create Release Maintenance section in the “Batch Utilities” chapter.

You can access the Create Document Updates utility by entering option **3** at the Document Utilities Menu.

There are two document update options:

- Generate maintenance by comparing documents
- Generate maintenance by copying a structure within a document.

```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc
                                Release nn.nn
                                Document Utilities
                                mm/dd/yy hh:mm
OPTION ==>
CA-IDMS/SASO Rnn.nn--- Create Document Updates -----
1 - Generate Maintenance by comparing DOCUMENTS
2 - Generate Maintenance by copying within a DOCUMENT

Specify "FROM" document below:
DOCUMENT NAME ==> SPG
CHAPTER ID ==> 2
SUBJECT ID ==> 1
TOPIC ID ==> 1

Specify "TO" document and release update information below:
DOCUMENT NAME ==>
RELEASE ID ==>

GENERATE DELETE MAINTENANCE ==> N      (Y=yes, N=no)
```

*Exhibit 2.55: Create Document Updates Utility Screen*



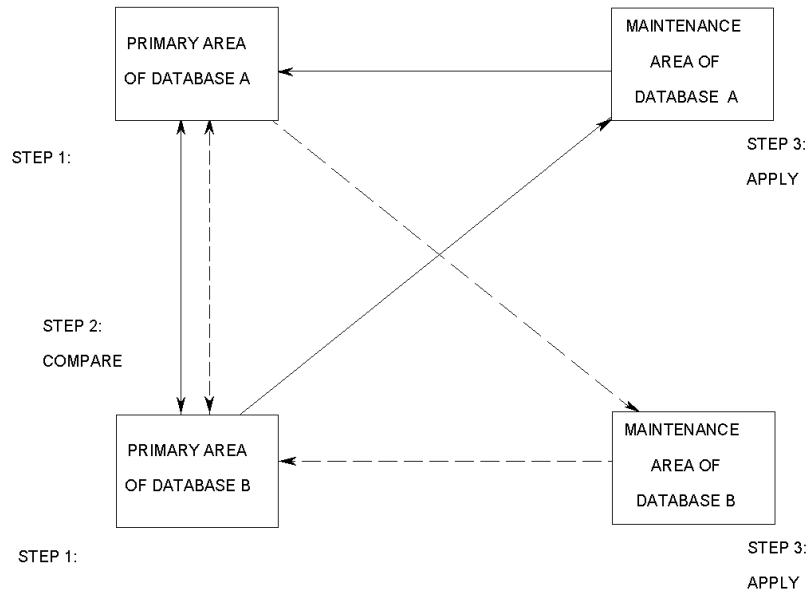
### 2.31.5.1 Generating Maintenance by Comparing Documents

The utility creates one set of maintenance by comparing two documents. For example, if Document A and Document B contain the exact same chapter 2 and the utility is run, no maintenance for chapter 2 is created.

However, if one subject has been added to chapter 2 of Document A, Document B receive inserts maintenance at the subject level and replace maintenance at the chapter level.

The document that receives the release maintenance depends upon your specifications. For example, if A is compared to B, the maintenance created under B is different than if B is compared to A.

Document maintenance is placed in the release maintenance database area under the release identifier provided. This means the changes can be identified as a specific set of release maintenance. Once these changes are identified as release maintenance, you can use the existing online Maintenance Option (option 4 on the CA-IDMS/SASO Primary Menu) to selectively review and apply the enhancements to the primary side of the document. Exhibit 2.56 provides a conceptual view of this process.



STEP 1: Edit document on primary database B with existing SASO online

STEP 2: Create set of maintenance updates on database A (maintenance side of the with Create Document Updates Utility.

STEP 3: Apply updates to primary database A with facilities of Maintenance Option.

KEY:

————— Solid lines represent a "FROM" document of B and a "TO" document of A.

- - - - - Dashed line represents a "FROM" document of B and a "TO" document of B.

*Exhibit 2.56: Creating Document Updates by Comparing Documents*

	Source Document ("from" Document)	Object Document ("to" Document)	Object Document Release Maintenance	
Document Level Maintenance Creation	Chapter 1 Chapter 2 Chapter 3 Chapter 4	Chapter 1 Chapter 2 Chapter 3	Chapter 1 (R)eplace Chapter 2 (R)eplace Chapter 3 (R)eplace Chapter 4 (I)nsert	
Chapter Level Maintenance Creation	Chapter 1 Subject 1.1 Subject 1.2 Subject 1.3	Chapter 1 Subject 1.1 Subject 1.2	Chapter 1 Subject 1.1 Subject 1.2 Subject 1.3	R R R R
Subject Level Maintenance Creation	Chapter 1 Subject 1.1 Topic 1.1.0 Topic 1.1.1 Subject 1.2 Topic 1.2.0 Topic 1.2.1 Topic 1.2.2 Topic 1.2.3 Topic 1.2.4	Chapter 1 Subject 1.1 Topic 1.1.0 Topic 1.1.1 Subject 1.2 Topic 1.2.0 Topic 1.2.1	Chapter 1 Subject 1.1 Topic 1.1.0 Topic 1.1.1 Subject 1.2 Topic 1.2.0 Topic 1.2.1 Topic 1.2.2 Topic 1.2.3 Topic 1.2.4	R R R R R R R I I I
Topic Level Maintenance Creation	Chapter 1 Subject 1.1 Topic 1.1.0 Text Rec-1 Text Rec-2 Text Rec-3 Text Rec-4	Chapter 1 Subject 1.1 Topic 1.1.0 Text Rec-1 Text Rec-2	Chapter 1 Subject 1.1 Topic 1.1.0 Text Rec-1 Text Rec-2 Text Rec-3 Text Rec-4	R R R R* R* I* I*

\*Internal Representation

*Exhibit 2.57: Generating Insert and Replace Maintenance*

	Source Document ("from" Document)	Object Document ("to" Document)	Object Document Release Maintenance	
Document Level Maintenance Creation	Chapter 1 Chapter 2 Chapter 3	Chapter 1 Chapter 2 Chapter 3 Chapter 4	Chapter 1 (R)eplace Chapter 2 (R)eplace Chapter 3 (R)eplace Chapter 4 (D)etele	
Chapter Level Maintenance Creation	Chapter 1 Subject 1.1 Subject 1.2	Chapter 1 Subject 1.1 Subject 1.2 Subject 1.3	Chapter 1 Subject 1.1 Subject 1.2 Subject 1.3	R R R D
Subject Level Maintenance Creation	Chapter 1 Subject 1.1 Topic 1.1.0 Topic 1.1.1 Subject 1.2 Topic 1.2.0 Topic 1.2.1	Chapter 1 Subject 1.1 Topic 1.1.0 Topic 1.1.1 Subject 1.2 Topic 1.2.0 Topic 1.2.1 Topic 1.2.2 Topic 1.2.3 Topic 1.2.4	Chapter 1 Subject 1.1 Topic 1.1.0 Topic 1.1.1 Subject 1.2 Topic 1.2.0 Topic 1.2.1 Topic 1.2.2 Topic 1.2.3 Topic 1.2.4	R R R R R R R D D D
Topic Level Maintenance Creation	Chapter 1 Subject 1.1 Topic 1.1.0 Text Rec-1 Text Rec-2	Chapter 1 Subject 1.1 Topic 1.1.0 Text Rec-1 Text Rec-2 Text Rec-3 Text Rec-4	Chapter 1 Subject 1.1 Topic 1.1.0 Text Rec-1 Text Rec-2 Text Rec-3 Text Rec-4	R R R R* R* D* D*

\*Internal Representation

*Exhibit 2.58: Generating Delete and Replace Maintenance*

### 2.31.5.2 Generating Maintenance by Copying Structures Within a Document

This option allows you to create maintenance **without** comparing two documents.

You can copy a chapter, subject, or topic from the primary side of a document into that document's release maintenance area.

This enables you to isolate document changes for download to a transportable file. You can then upload the maintenance and apply it in other CA-IDMS/DC central version (CV) documents.

Refer to the online documentation for more information on using the Create Document Updates screen.

### 2.31.6 Add/Copy Document Configuration Utility

The Add/Copy Document utility enables you to copy the configurations specified for one document to another. Document configurations allow you to determine how a document looks when it is printed. See 2.21.8, “Document Configuration Utility” on page 2-48 for a complete description.

Once the configurations for a document have been determined, you can use the Add/Copy Document Configurations utility to establish or replace these configurations in another document.

You can access the Add/Copy Document Configuration utility by entering option **4** from the Document Utilities screen.

Refer to the online documentation for detailed information on the Add/Copy Document Configuration screen.

```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc
                                Release nn.nn
                                Document Utilities
                                mm/dd/yy hh:mm
COMMAND ==>
CA-IDMS/SASO Rnn.nn--- Add/Copy Document Configuration -----
Specify "FROM" document below:
DOCUMENT NAME ==> SPG          (Blank for Default Configuration)
Specify "TO" document for configuration replacement below:
DOCUMENT NAME ==>

```

*Exhibit 2.59: Add/Copy Document Configuration Screen*

### 2.31.7 Add/Copy Printer Configuration Utility

The Add/Copy Printer Configuration utility allows you to assign, to a specific document, a printer and its associated JCL and/or OCL configurations. These printer configurations can initially be assigned to a printer using the Printer Configuration utility (3.6).

You can access the Add/Copy Printer Configuration utility by entering option **5** at the Document Utilities Menu.

Refer to the online documentation for detailed information on the Add/Copy Printer Configuration screen.

```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc.
                                Release nn.nn
                                Document Utilities
                                mm/dd/yy hh:mm
COMMAND ==>
CA-IDMS/SASO Rnn.nn--- Add/Copy Printer Configuration -----
Specify "FROM" document below:
DOCUMENT NAME ==> SPG
PRINTER DEVICE ==>

Specify "TO" document for configuration placement below:
DOCUMENT NAME ==>

"TO" options:
COPY TYPE   ==> R           (R-replace, A-add)
COPY MEMBER ==> A           (J-jcl, O-ocl, or A-all)

For COPY TYPE "A", specify "PRINTER DEVICE" name, if different:
PRINTER DEVICE ==>
```

*Exhibit 2.60: Add/Copy Printer Configuration Screen*

## 2.31.8 String Search Facility

The String Search facility gives you the ability to search any CA-IDMS/SASO document for a string of alphanumeric characters.

CA-IDMS/SASO responds by displaying a Topic List of all those topics containing the specified string. You can then select a topic to browse or edit.

You can access the String Search facility by entering option **6** at the Document Utilities Menu.

Refer to the online documentation for detailed information on the String Search Facility screen.

```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc
                                Release nn.nn
                                Document Utilities
                                mm/dd/yy hh:mm
COMMAND ==>
CA-IDMS/SASO Rnn.nn--- String Search Facility -----

Searching Document SPG

001500 Text Records Searched -- 0000000 Occurrences of String Located

ENTER SEARCH STRING:

ADS
---+---1---+---2---+---3---+---4---+---5---+---6---+---7---+---
Specify full or partial "DOCUMENT" name below:
DOCUMENT NAME ==> SPG          (Blank for Document List)

Specify option for TEXT PROCESSING:
Browse or Edit? ==> B          (B-Browse or E-Edit)

```

Exhibit 2.61: String Search Facility Screen

```

                                STANDARDS, PROCEDURES, AND GUIDELINES
                                Computer Associates Intl., Inc
                                Release nn.nn
                                mm/dd/yy hh:mm
COMMAND ==>
SAS0161I-STRING SEARCH LOCATED THE FOLLOWING TOPICS WHICH CONTAIN THE TARGET

ID          KEYWORD NAME      TOPIC NAME
A.3.21      ADS/ONLINE        ADS/O APPLICATION FUNCTION WORK SHEET
G.A.0       A                GLOSSARY ENTRIES
G.F.0       F                GLOSSARY ENTRIES
G.P.0       P                GLOSSARY ENTRIES
G.R.0       R                GLOSSARY ENTRIES
G.U.0       U                GLOSSARY ENTRIES
2.6.0       OVERVIEW         SUBJECT OVERVIEW
2.11.3      IDD              TEST CV
2.13.0      OVERVIEW         SUBJECT OVERVIEW
3.7.0       APPLICATION      MIGRATION PROCEDURE
4.8.3       LRF              LRF TIPS AND HINTS
4.8.6       LRF              WHEN TO USE LRF
4.10.6      ADS              CA-ADS (APPLICATION DEVELOPMENT SYSTEM)
4.10.12     ICMS             INFORMATION CENTER MANAGEMENT S YSTEM

```

Exhibit 2.62: Topic List Screen (String Search)

## 2.32 Tutorial Option

This section briefly explains CA-IDMS/SASO online documentation. The online documentation provides information about the features of CA-IDMS/SASO.



## 2.33 Purpose of Tutorial Option

CA-IDMS/SASO provides you with comprehensive online documentation. To access the online documentation, enter the HELP command or press the appropriate PF key from any CA-IDMS/SASO screen.

CA-IDMS/SASO online documentation includes information about:

- CA-IDMS/SASO screens
- CA-IDMS/SASO commands
- Edit and browse commands
- CA-IDMS/SASO Messages.

In addition, the Online Documentation Print Utility provided with CA-IDMS/SASO allows error messages and other online documentation to be printed upon request.

**Note:** See Chapter 4, “Operations” on page 4-1 for more detail about accessing and printing information about CA-IDMS/SASO.

## 2.34 Using CA-IDMS/SASO Online Documentation

To invoke the online documentation, enter option **T** at the **OPTION** field of the CA-IDMS/SASO Primary Menu.

After you have typed in the **T** option and pressed the **ENTER** key, an online documentation selection menu appears.

From this screen you can take one of the following actions:

- Exit the online documentation by pressing the **PF3** key
- Proceed with using the online documentation by selecting a topic
- Enter the **HELP** command again to obtain information on using CA-IDMS/SASO's online documentation.

You can also access the online documentation for any CA-IDMS/SASO screen by entering the **HELP** command at the screen. When the **HELP** command is used, information is displayed about the current screen.

## 2.35 Exit

This section explains the Exit Option. Select this option when you want to leave CA-IDMS/SASO.

## 2.36 Purpose of Exit Option

Select the Exit Option (**X**) to sign off of CA-IDMS/SASO. When the Exit Option is selected, all CA-IDMS/SASO operations are terminated and you are brought back to the CA-IDMS/DC system prompt.

### 2.36.1 Signing off of CA-IDMS/SASO

You can exit CA-IDMS/SASO from the CA-IDMS/SASO Primary Menu screen or from one of the lower level screens. To exit CA-IDMS/SASO from the CA-IDMS/SASO Primary Menu screen:

- Type an **X**, for the Exit Option, at the OPTION field and press the ENTER key.

To exit CA-IDMS/SASO from a lower level screen:

- Type **=X**, at the COMMAND field, from any lower level screen and press the ENTER key.

## Chapter 3. Batch Utilities

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This chapter explains each of CA-IDMS/SASO's batch utilities. Descriptions of input parameters for job execution and sample JCL are included in the appropriate Target or Distribution source library (OS/390), TOOLJCL library (VSE/ESA), or MACLIB (VM/ESA) members. Figures showing the resultant batch utility report outputs are also included.

## 3.1 CA-IDMS/SASO Batch Utilities

CA-IDMS/SASO provides the following batch utilities:

- Download CA-IDMS/SASO Document Structure (ESSDLOD)
- Upload CA-IDMS/SASO Document Structure (ESSULOD)
- Create Release Maintenance (ESSRLSE)
- Offload Release Maintenance (ESSMOFF)
- Upload Release Maintenance (ESSMLOD)
- Upload Topic Text Structure (ESSTEXT)
- Print Documents (ESSPRINT).

These utilities may generate messages when they are run. Refer to Chapter 5, “Messages” on page 5-1 or the Online Message Facility for an explanation of the messages produced by these jobs. You can access the Online Message Facility by entering option **M** at the first screen of any CA-IDMS/SASO online documentation module.

### 3.1.1 Download CA-IDMS/SASO Document Structure (ESSDLOD)

This utility downloads the installed CA-IDMS/SASO database structure to a transportable file. When you execute this utility, the primary side of the database, including all chapters, subjects, topics, topic text, printer configurations, and document configurations, is downloaded into a transportable file.

Target or Distribution source library member ESSDLOD (OS/390), TOOLJCL library member ESSDLOD.S (VSE/ESA), or the ESSDLOD EXEC (VM/ESA) contains the model JCL and key for this utility (the upload uses ESSULOD), and keyword parameter information. You can also access keyword parameter information using the online documentation.

#### 3.1.1.1 Report Output

After executing ESSDLOD, review the Audit Report (shown in Exhibit 3.1). Successful execution produces informative messages that do not require remedial action. If ESSDLOD does not execute successfully, warning and/or error messages appear on the report. Correct any errors and resubmit the job.

CA-TOOLS	RELEASE Rnn.nn	CA-STANDARDS ADMINISTRATION SYSTEM ONLINE DOWNLOAD DISCREPANCY REPORT	DATE mm/dd/yy	TIME hh:mm:ss	PAGE xxxx
V-----1-----2-----3-----4-----5-----6-----7-V					
PROCESS,SRCDOCUMENT=SASODN02					
NKWP091I INPUT PARAMETER STATEMENT					
NKWP094I END OF PARAMETER INPUT					
DLOD001I-SUCCESSFUL DOWNLOAD OF "SASODN02" DOCUMENT					

*Exhibit 3.1: Audit Report for Download Discrepancies Report (ESSDLOD)*



### 3.1.2 Upload CA-IDMS/SASO Document Structure (ESSULOD)

This utility initially used to install the Computer Associates-supplied Standards, Procedures and Guidelines (SP&G) manual, uploads the CA-IDMS/SASO structure file into the primary areas of the installed database. Before you can execute this utility, you need to add the database (which houses a document) to CA-IDMS/SASO. See the installation guide for information on establishing multiple CA-IDMS/SASO databases.

You can replace the entire contents of an existing document or restrict the upload so that printer configurations are **not** uploaded from the structure file through keyword parameter specifications.

Target or Distribution source library member ESSULOD (OS/390), TOOLJCL library member ESSULOD.S (VSE/ESA), or the ESSULOD EXEC (VM/ESA) contains the model JCL and key for this utility, and keyword parameter information. You can also access keyword parameter information using the online documentation.

**Note:** We strongly recommend that you execute this utility in local mode, especially if your disk journals are limited in size.

#### 3.1.2.1 Report Output

After executing ESSULOD, review the Audit Report (shown in Exhibit 3.2). Successful execution produces informative and/or warning messages. Informative messages do not require remedial action. Warning messages may require corrective action, depending upon individual analysis of the warning message. If ESSULOD does not execute successfully, error messages appear on the Audit Report. Correct any errors and resubmit the job ESSULOD.

CA-TOOLS	RELEASE Rnn.nn	CA-STANDARDS ADMINISTRATION SYSTEM ONLINE UPLOAD DISCREPANCY REPORT	DATE mm/dd/yy	TIME hh:mm:ss	PAGE nnnn
V---+-----1-----+-----2-----+-----3-----+-----4-----+-----5-----+-----6-----+-----7-V					
NKWP091I INPUT PARAMETER STATEMENT      PROCESS,OBJDOCUMENT=SASODN01,REPLACE					
NKWP094I END OF PARAMETER INPUT					
ULOD001I-SUCCESSFUL UPLOAD FOR "SASODN01" DOCUMENT					

*Exhibit 3.2: Audit Report for Upload Discrepancies Report (ESSULOD)*

### 3.1.3 Create Release Maintenance (ESSRLSE)

This utility creates a set of maintenance by comparing two documents. For example, if Document A and Document B contain the exact same chapter 2, and you run ESSRLSE, no maintenance for chapter 2 is created. However, if one subject was added to chapter 2 of Document A, Document B receives insert maintenance at the subject level and replace maintenance at the chapter level. Exhibit 3.3 explains how to generate insert and replace maintenance.

As an option, you can generate chapter, subject, or topic and topic text delete maintenance through keyword parameter specification. For example, if Document B (object

document) contains chapter 4 and Document A (source document) does not, Document B receives delete maintenance at the chapter level, for Chapter 4. See Exhibit 3.4 for information on generating delete and replace maintenance.

The maintenance created is stored in the maintenance area of the database that maps to the object document for utility function (i.e., Document B discussed above). If you apply maintenance to the object document, it will equal the source document. For information on how to apply maintenance, see 2.22, “Maintenance Option” on page 2-60.

You can also use ESSRLSE to copy maintenance in a single document from the permanent side to the release maintenance side of the database similar to the online utility, Create Document Updates (D.3). Copy capabilities are enabled through identical document name specifications in the object and source document keyword parameters.

Target or Distribution source library member ESSRLSE (OS/390), TOOLJCL library member ESSRLSE.S (VSE/ESA), or the ESSRLSE EXEC (VM/ESA) contains the model JCL and key for this utility, and keyword parameter information. You can also access keyword parameter information using the online documentation.

**Note:** We strongly recommend that you execute this utility in local mode, especially for job runs at the document level. Severe loading of the journal files may occur if disk journals are limited in size.

	Source Document ("from" Document)	Object Document ("to" Document)	Object Document Release Maintenance	
Document Level Maintenance Creation	Chapter 1 Chapter 2 Chapter 3 Chapter 4	Chapter 1 Chapter 2 Chapter 3	Chapter 1 (R)eplace Chapter 2 (R)eplace Chapter 3 (R)eplace Chapter 4 (I)nsert	
Chapter Level Maintenance Creation	Chapter 1 Subject 1.1 Subject 1.2 Subject 1.3	Chapter 1 Subject 1.1 Subject 1.2	Chapter 1 Subject 1.1 Subject 1.2 Subject 1.3	R R R R
Subject Level Maintenance Creation	Chapter 1 Subject 1.1 Topic 1.1.0 Topic 1.1.1 Subject 1.2 Topic 1.2.0 Topic 1.2.1 Topic 1.2.2 Topic 1.2.3 Topic 1.2.4	Chapter 1 Subject 1.1 Topic 1.1.0 Topic 1.1.1 Subject 1.2 Topic 1.2.0 Topic 1.2.1	Chapter 1 Subject 1.1 Topic 1.1.0 Topic 1.1.1 Subject 1.2 Topic 1.2.0 Topic 1.2.1 Topic 1.2.2 Topic 1.2.3 Topic 1.2.4	R R R R R R R I I I
Topic Level Maintenance Creation	Chapter 1 Subject 1.1 Topic 1.1.0 Text Rec-1 Text Rec-2 Text Rec-3 Text Rec-4	Chapter 1 Subject 1.1 Topic 1.1.0 Text Rec-1 Text Rec-2	Chapter 1 Subject 1.1 Topic 1.1.0 Text Rec-1 Text Rec-2 Text Rec-3 Text Rec-4	R R R R* R* I* I*

\*Internal Representation

*Exhibit 3.3: Generating Insert and Replace Maintenance (ESSRLSE)*

	Source Document ("from" Document)	Object Document ("to" Document)	Object Document Release Maintenance	
Document Level	Chapter 1	Chapter 1	Chapter 1 (R)eplace	
Maintenance	Chapter 2	Chapter 2	Chapter 2 (R)eplace	
Creation	Chapter 3	Chapter 3	Chapter 3 (R)eplace	
		Chapter 4	Chapter 4 (D)elede	
Chapter Level	Chapter 1	Chapter 1	Chapter 1	R
Maintenance	Subject 1.1	Subject 1.1	Subject 1.1	R
Creation	Subject 1.2	Subject 1.2	Subject 1.2	R
		Subject 1.3	Subject 1.3	D
Subject Level	Chapter 1	Chapter 1	Chapter 1	R
Maintenance	Subject 1.1	Subject 1.1	Subject 1.1	R
Creation	Topic 1.1.0	Topic 1.1.0	Topic 1.1.0	R
	Topic 1.1.1	Topic 1.1.1	Topic 1.1.1	R
	Subject 1.2	Subject 1.2	Subject 1.2	R
	Topic 1.2.0	Topic 1.2.0	Topic 1.2.0	R
	Topic 1.2.1	Topic 1.2.1	Topic 1.2.1	R
		Topic 1.2.2	Topic 1.2.2	D
		Topic 1.2.3	Topic 1.2.3	D
		Topic 1.2.4	Topic 1.2.4	D
Topic Level	Chapter 1	Chapter 1	Chapter 1	R
Maintenance	Subject 1.1	Subject 1.1	Subject 1.1	R
Creation	Topic 1.1.0	Topic 1.1.0	Topic 1.1.0	R
	Text Rec-1	Text Rec-1	Text Rec-1	R*
	Text Rec-2	Text Rec-2	Text Rec-2	R*
		Text Rec-3	Text Rec-3	D*
		Text Rec-4	Text Rec-4	D*

\*Internal Representation

*Exhibit 3.4: Generating Delete and Replace Maintenance (ESSRLSE)*

### 3.1.3.1 Report Output

After executing ESSRLSE, review the Audit Report (shown in Exhibit 3.5). Successful execution produces informative messages, which do not require remedial action. If ESSRLSE does not execute successfully, warning and/or error messages appear on the report. Correct any errors and resubmit the job.

CA-TOOLS	RELEASE Rnn.nn	CA-STANDARDS ADMINISTRATION SYSTEM ONLINE CREATE DOCUMENT UPDATES REPORT	DATE mm/dd/yy	TIME hh:mm:ss	PAGE xxxx
NKWP091I INPUT PARAMETER STATEMENT		V-----1-----2-----3-----4-----5-----6-----7-V			
NKWP092I CONTINUATION STATEMENT		PROCESS,	00070203		
NKWP092I CONTINUATION STATEMENT		SRCDOCUMENT=SPG,			
NKWP092I CONTINUATION STATEMENT		OBJDOCUMENT=SASODN01,	00070203		
NKWP092I CONTINUATION STATEMENT		OBJMAINTID=DBADMIN,			
NKWP092I CONTINUATION STATEMENT		OBJDELETE=Y	00070203		
NKWP094I END OF PARAMETER INPUT					
SAS0122I REQUEST FOR RELEASE	release-id	IN DOCUMENT document-name	COMPLETE		

*Exhibit 3.5: Audit Report for Create Document Updates Report (ESSRLSE)*

### 3.1.4 Offload Release Maintenance (ESSMOFF)

This utility offloads a maintenance structure from the maintenance area of the installed database to a transportable file. Maintenance is offloaded from the maintenance area of the database specified in keyword parameters. The offloaded structure file ddname is RELEASE. The maintenance upload uses the job ESSMLOD.

The job ESSMOFF produces a printed report showing a summary of your enhancements offloaded (Maintenance Release Summary Report).

Keyword parameters allow you to specify the document and release maintenance group for offload. The printer device that prints the output can also be specified. Additional print keywords are available to direct the total number of lines to be printed on a page, the beginning column for the leftmost margin, and print type case.

Target or Distribution source library member ESSMOFF (OS/390), TOOLJCL library member ESSMOFF.S (VSE/ESA), or the ESSMOFF EXEC (VM/ESA) contains the model JCL and key for this utility, and keyword parameter information. You can also access keyword parameter information using the online documentation.

#### 3.1.4.1 Report Output

The printed form of CA-IDMS/SASO enhancements is like printed output from the online and batch print utilities. Printed output describes document, company and division information, dates of creation and revision, and shows the textual contents of topics. For an example of CA-IDMS/SASO printed output, see 2.21.16, “Print Request” on page 2-55.

After executing ESSMOFF, review the Audit Report. Successful execution produces informative messages that do not require remedial action. If ESSMOFF does not execute successfully, warning and/or error messages appear on the Audit Report. Correct any errors and resubmit the job ESSMOFF.

The Maintenance Release Summary Audit Report lists the contents of the Release Maintenance enhancement. The report, shown in Exhibit 3.6, includes the IDs, the names, and the type of transaction for each enhancement.

CA-TOOLS	RELEASE Rnn.nn	CA-STANDARDS ADMINISTRATION SYSTEM ONLINE MAINTENANCE RELEASE SUMMARY	DATE mm/dd/yy	TIME hh:mm:ss	PAGE nnnn
V-----1-----2-----3-----4-----5-----6-----7-V					
NKWP091I	INPUT PARAMETER STATEMENT	PROCESS,	00070203		
NKWP092I	CONTINUATION STATEMENT	SRCDOCUMENT=SASODN01,	00070203		
NKWP092I	CONTINUATION STATEMENT	SRCMAINTID=COMP0001,			
NKWP092I	CONTINUATION STATEMENT	PRINTER=IMPACT,	00070203		
NKWP092I	CONTINUATION STATEMENT	CASE=M,PAGELEN=66,COLBEGIN=10	00070203		
NKWP094I	END OF PARAMETER INPUT				
2.1.0	SUBJECT OVERVIEW	REPLACE			
2.1.1	SCHEMA NAME--TEST RENAME	REPLACE			
2.1.2	DMCL NAME	REPLACE			
2.1.3	SUBSCHEMA NAME	REPLACE			
2.14.0	OVERVIEW	INSERT			
2.14.1	USERS	INSERT			
2.14.2	EDUCATION REQUIREMENTS	INSERT			
2.14.3	RESOURCE ALLOCATION AND MANAGEMENT	INSERT			
2.14.4	MAINFRAME DATA OR END USER DATA	INSERT			
2.14.5	USING ASF FOR PROTOTYPING	INSERT			
3.7.0	MIGRATION PROCEDURE	REPLACE			
4.4.0	SUBJECT OVERVIEW	REPLACE			
4.4.1	SYSTEM DEVELOPMENT REQUIREMENTS	REPLACE			
4.4.2	SYSTEM SECURITY REQUIREMENTS	REPLACE			
4.4.3	SYSTEM DOCUMENTATION REQUIREMENTS	REPLACE			
4.5.8	EXAMPLE	REPLACE			
4.7.0	SUBJECT OVERVIEW	REPLACE			
4.7.1	MULTIPLE DICTIONARIES	REPLACE			
4.7.2	CLASS/ATTRIBUTE STRUCTURES	REPLACE			
4.7.4	DDR REPORTS	REPLACE			
4.7.5	DISPLAY AND PUNCH IDMSDDL SYNTAX	REPLACE			
4.7.6	THE IDMS Dictionary Migrator	REPLACE			
4.8.3	LRF COMMUNICATION TOOL	REPLACE			
4.15.0	SUBJECT OVERVIEW	REPLACE			
4.15.3	USES OF INTEGRATED INDEXING	DELETE			
4.15.4	INTERNAL INDEX STRUCTURES	DELETE			
4.15.5	IMPLEMENTATION RECOMMENDATIONS	REPLACE			
4.15.6	SPACE REQUIREMENT CALCULATIONS	REPLACE			
7.13.0	ASF OVERVIEW	REPLACE			
7.13.1	THE ASF DATABASE ENVIRONMENT	REPLACE			
7.13.2	THE IDMSR SCHEMA	REPLACE			
7.13.3	ASF EXTENT SPACE MANAGEMENT	REPLACE			
7.13.4	DETERMINING RESOURCE DEMANDS	REPLACE			
7.13.5	SPACE ALLOCATION FOR STORED TABLES	REPLACE			
7.13.6	DEFINITION AREA SPACE REQUIREMENTS	REPLACE			
7.13.7	ASF ADMINISTRATIVE FUNCTIONS	REPLACE			
7.13.8	ASF VIEWS OF NETWORK DATABASES	REPLACE			
7.13.9	PROBLEM DETERMINATION	REPLACE			
7.13.10	ASF MAINTENANCE AND CHANGES	REPLACE			
7.13.11	ASF TIPS AND TOOLS	REPLACE			
7.14.0	SUBJECT OVERVIEW	INSERT			
7.14.1	CHOOSING PROGRAMS FOR RESTART	INSERT			
7.14.2	AUTOMATIC RECOVERY	INSERT			
7.14.3	RESTART DATA BASE RECORD TYPES	INSERT			
7.14.4	RESTART PROGRAM LOGIC	INSERT			
A.3.17	ADS APPLICATION FUNCTION WORKSHEET	REPLACE			
A.3.18	ADS APPLICATION RESPONSE WORKSHEET	REPLACE			
MOFF001I-SUCCESSFUL OFFLOAD AND PRINT OF MAINTENANCE "COMP0001" FROM "SASODN01"					

*Exhibit 3.6: CA-IDMS/SASO Maintenance Release Summary Audit Report (ESSMOFF)*

### 3.1.5 Upload Release Maintenance (ESSMLOD)

This utility uploads the CA-IDMS/SASO offloaded maintenance structure file into the maintenance area of the database specified in keyword parameters.

Target or Distribution source library member ESSMLOD (OS/390), TOOLJCL library member ESSMLOD.S (VSE/ESA), or the ESSMLOD EXEC (VM/ESA) contains the model JCL and key for this utility, and keyword parameter information. You can also access keyword parameter information using the online documentation.

**Note:** We strongly recommend that you execute this utility in local mode, especially if your disk journals are limited in size.

### 3.1.5.1 Report Output

After executing ESSMLOD, review the Audit Report. Successful execution produces informative messages that do not require remedial action. If ESSMLOD does not execute successfully, warning and/or error messages appear on the Audit Report. Correct any errors and resubmit the job ESSMLOD.

A discrepancy report is generated by a comparison between the release and primary side of the CA-IDMS/SASO database structure (Release Maintenance Discrepancies Report). You can also optionally produce a Long Report, Change Report, and Summary Report. An example of these reports can be found in Exhibit 3.7.

The Release Maintenance Discrepancies Audit Report, shown in Exhibit 3.7, shows the comparison between the text of the enhancement and the text of its corresponding structure on your database. This report enables you to track and compare:

- Movement of Structures (chapter, subjects, or topics)
- Inserted structures
- Deleted structures
- Existing structures
- Altered chapter, subject, topic, and keyword names
- Altered chapter, subject, and topic external reference identifiers
- Your text with the corresponding enhancement text.

### 3.1.5.2 Long Report (ESSMLOD)

The optional Long Report displays every line of text, and each inserted and deleted text line in context.

- **OLD NUMBER**--When a release maintenance topic is compared to an existing topic, topic text (RECORD) matches may or may not occur at the same line sequence number for the topic. This field indicates the line number position of the existing topic text. Or, in the comparison process, existing topic text (RECORD) was located at the line sequence number indicated in this field.
- **NEW NUMBER**--Release maintenance topic text (RECORD) is located at the line number indicated in this field. Or, topic text (RECORD) is located at the line number indicated in this field in the release maintenance topic.
- **CHG**--This field indicates the type of change that occurred, resulting in the variance between the enhancement and its corresponding structure on your database. Change types include:
  - **I**nsert types indicate that a new RECORD is contained in the enhancement that does not reside in the primary side of the database.

- **DDelete** types indicate that a RECORD that exists in the primary side of your database is not contained in the enhancement.
- **RECORD**--The topic text (RECORD) that is contained in the enhancement, or its corresponding structure on your database, or both.

### 3.1.5.3 Change Report (ESSMLOD)

The optional Change Report provides the same information as the Long Report, but only inserted and deleted text lines are displayed.

- **OLD NUMBER**--When a release maintenance topic is compared to an existing topic, topic text (RECORD) matches may or may not occur at the same line sequence number for the topic. This field indicates the line number position of the existing topic text. Or, in the comparison process, existing topic text (RECORD) was located at the line sequence number indicated in this field.
- **NEW NUMBER**--Release maintenance topic text (RECORD) is located at the line number indicated in this field. Or, topic text (RECORD) is located at the line number indicated in this field in the release maintenance topic.
- **CHG**--This field indicates the type of change that occurred, resulting in the variance between the enhancement and its corresponding structure on your database. Change types include:
  - **I**Insert types indicate that a new RECORD is contained in the enhancement that does not reside in the primary side of the database.
  - **D**Delete types indicate that a RECORD that exists in the primary side of your database is not contained in the enhancement.
- **RECORD**--The topic text (RECORD) that is contained in the enhancement, or its corresponding structure on your database, or both.

### 3.1.5.4 Summary Report (ESSMLOD)

The optional Summary Report displays counts of record matches, inserts, and deletes.

- **MATCHED RECORDS**--The total number of RECORDs found in the enhancement and its corresponding structure on your database that exactly matched.
- **RECORDS DELETED FROM OLD FILE**--RECORDs that exist in the primary side of your database, but are not contained in the enhancement.
- **RECORDS INSERTED INTO NEW FILE**--The total number of RECORDs that have been added in the enhancement but not in its corresponding structure on your database.
- **OLD FILE RECORDS**--Total number of RECORDs processed that are contained in the primary side of your database.
- **NEW FILE RECORDS**--The total number of enhancement RECORDs.

See Exhibit 3.7 for examples of report output. For more information on this utility, see 2.22, “Maintenance Option” on page 2-60.



CA-TOOLS	RELEASE Rnn.nn	CA-STANDARDS ADMINISTRATION SYSTEM ONLINE RELEASE MAINTENANCE DISCREPANCIES	DATE mm/dd/yy	TIME hh:mm:ss	PAGE xxxx
V---+---1---+---2---+---3---+---4---+---5---+---6---+---7-V					
NKWP091I INPUT PARAMETER STATEMENT		PROCESS,OBJDOCUMENT=SPG,REPLACE			
NKWP094I END OF PARAMETER INPUT					

CA-TOOLS	RELEASE Rnn.nn	CA-STANDARDS ADMINISTRATION SYSTEM ONLINE RELEASE MAINTENANCE DISCREPANCIES	DATE mm/dd/yy	TIME hh:mm:ss	PAGE xxxx
***** TOPIC IS A REPLACE *****		***** REVISED TOPIC INFORMATION *****			
* CHAPTER: 2		* CHAPTER: 2			*
* SUBJECT: 12		* SUBJECT: 12			*
* TOPIC: 0		* TOPIC: 0			*
*		*			*
*CHAPTER NAME: STANDARDS FOR SYSTEMS DEVELOPMENT		*CHAPTER NAME: STANDARDS FOR SYSTEMS DEVELOPMENT			*
*SUBJECT NAME: PROGRAM SPECIFICATION STANDARD		*SUBJECT NAME: PROGRAM SPECIFICATION STANDARD			*
* TOPIC NAME: SUBJECT OVERVIEW		* TOPIC NAME: SUBJECT OVERVIEW			*
* KEYWORD: OVERVIEW		* KEYWORD: OVERVIEW			*
*****		*****			
TOPIC TEXT ANALYSIS					

CA-TOOLS	RELEASE Rnn.nn	CA-STANDARDS ADMINISTRATION SYSTEM ONLINE RELEASE MAINTENANCE DISCREPANCIES	DATE mm/dd/yy	TIME hh:mm:ss	PAGE xxxx
CA-TOOLS	RELEASE Rnn.nn	CA-STANDARDS ADMINISTRATION SYSTEM ONLINE LONG REPORT	DATE mm/dd/yy	TIME hh:mm:ss	PAGE xxxx
OLD NUMBER	NEW NUMBER	CHG RECORD			
1	1				
2	2	PURPOSE:			
3	3	To establish the program specification requirements			
4	4	all computer programs.			
5	5				
6	6	SCOPE:			
7	7	This standard applies to all program specifications,			
8	8	database or conventional access. It is of interest			
9	9	to analysts, designers, programmers and the DBA staff.			
10	10	DOCUMENTATION			
11	11	REQUIREMENTS: Written Program Specification Document			
12	12				
13	13	OVERVIEW:			
14	14				
15	15	Program Specifications improve communication between systems analysts			
16	16	and programmer/analysts by providing a concrete record of program			
17	17	requirements. Hard copy requirements documentation minimizes the			
18	18	necessity for verbal communication, thereby improving the productivity			
19	19	of both analysts and programmers, and providing a development audit			
20	20	trail.			
21	21				
22	22	+I+			
23	23	Using the IDD to record program specifications makes it possible to			
24	24	provide the backup and recovery facilities of IDMS to the project			
25	25	documentation as well as to the company's data. Although using the			
26	26	IDD for documentation is not a standard, it is highly recommended			
27	27	except when disk space and performance are at issue, and resources			
28	28	to maintain a larger IDD are not available.			
29	29	+I+			
30	30	:NE			
28	30				
29	31	STANDARD:			
30	32				

Exhibit 3.7: Report Output for Release Maintenance Discrepancies (ESSMLOD)

### 3.1 CA-IDMS/SASO Batch Utilities

CA-TOOLS		RELEASE Rnn.nn	CA-STANDARDS ADMINISTRATION SYSTEM ONLINE CHANGE REPORT		DATE mm/dd/yy	TIME hh:mm:ss	PAGE xxxx
OLD NUMBER	NEW NUMBER	CHG	RECORD				
1	1						
21	21						
	22	+I+	:NS				
22	23						
27	28						
	29	+I+	:NE				
28	30						
30	32						

CA-TOOLS	RELEASE Rnn.nn	CA-STANDARDS ADMINISTRATION SYSTEM ONLINE SUMMARY REPORT	DATE mm/dd/yy	TIME hh:mm:ss	PAGE xxxx
OLD AND NEW FILE MATCHING STATISTICS					
30 MATCHED RECORDS					
0 RECORDS DELETED FROM OLD FILE					
2 RECORDS INSERTED INTO NEW FILE					
30 OLD FILE RECORDS					
32 NEW FILE RECORDS					
CMPR0011 COMPARATOR ENDED, CC=2					

CA-TOOLS	RELEASE Rnn.nn	CA-STANDARDS ADMINISTRATION SYSTEM ONLINE RELEASE MAINTENANCE DISCREPANCIES	DATE mm/dd/yy	TIME hh:mm:ss	PAGE xxxx
ML0D0011-MAINTENANCE "SPyymmnnn" SUCCESSFULLY INSTALLED FOR "SPG"					

*Exhibit 3.8: Report Output for Release Maintenance Discrepancies (ESSMLOD)*

#### 3.1.6 Upload Topic Text Structure (ESSTEXT)

This utility uploads 80-byte records from one or more sequential files (TEXT) into the primary areas of the installed database as topic text.

Before you can execute this utility, use the online Add Utility (option 3.2) to add the chapter reference identifier and name, the subject identifier and name, and the topic reference identifier and name. See 2.22, “Maintenance Option” on page 2-60.

Keyword parameters direct upload processes to a specific database structure. You can optionally replace the entire contents of the topic (all topic text records) with the contents of the sequential file, through keyword parameter specifications.

You can upload multiple topics from a sequential file that contains imbedded control cards in front of topic text. Keyword parameter specification enables you to direct utility processing for single topic text upload or for multiple topic text uploads. Multiple topics can be uploaded with a single execution of the ESSTEXT utility.

Target or Distribution source library member ESSTEXT (OS/390), TOOLJCL library member ESSTEXT.S (VSE/ESA), or the ESSTEXT EXEC (VM/ESA) contains the

model JCL and key for this utility, and keyword parameter information. You can also access keyword parameter information using the online documentation.

Input to the text dataset can be either a sequential file or a PDS member. Datasets can be concatenated.

### 3.1.6.1 Input File Examples

#### Format 1

```
//TEXT DD DSN=your.custom.text,DISP=SHR
```

#### Format 2

```
//TEXT DD DSN=your.custom.text(txtgroup),DISP=SHR
```

#### Format 3

```
//TEXT DD DSN=your.custom.text(txtgrp1),DISP=SHR
//      DD DSN=your.custom.text(txtgrp2),DISP=SHR
```

### 3.1.6.2 Report Output

After executing ESSTEXT, review the Audit Report (shown in Exhibit 3.8). Successful execution produces informative or warning messages. Informative messages do not require remedial action. Warning messages may require corrective action, depending upon individual analysis of the warning message. If ESSTEXT does not execute successfully, error messages appear on the Audit Report. Correct any errors and resubmit the job ESSTEXT.

CA-TOOLS	RELEASE Rnn.nn	CA-STANDARDS ADMINISTRATION SYSTEM ONLINE TOPIC TEXT UPLOAD REPORT	DATE mm/dd/yy	TIME hh:mm:ss	PAGE nnnn
V-----1-----2-----3-----4-----5-----6-----7-V					
NKWP091I	INPUT	PARAMETER STATEMENT	MULTIPLE	00009306	
NKWP094I	END OF	PARAMETER INPUT			
TEXT007I	SUCCESSFUL	TOPIC TEXT UPLOAD			
*LOADSASODN016	9	0			
TEXT007I	SUCCESSFUL	TOPIC TEXT UPLOAD			
*LOADSASODN016	9	1			
TEXT007I	SUCCESSFUL	TOPIC TEXT UPLOAD			
*LOADSASODN016	9	2			
TEXT005E	OBJTOPIC	"1" WAS NOT FOUND IN THE "SASODN01" DOCUMENT			
*LOADSASODN012	3	1			
TEXT007I	SUCCESSFUL	TOPIC TEXT UPLOAD			
*LOADSPG	1	1	0		

Exhibit 3.9: Audit Report for Topic Text Upload (ESSTEXT)

### 3.1.7 Print CA-IDMS/SASO Documents (ESSPRINT)

Like the online Print Request Utility, the batch print utility enables you to print an entire document and ranges of or specific chapters, subjects, or topics. Printed output describes document and company information, dates of creation and revision, and the textual contents of topics.

Keyword parameters allow you to specify the document and optionally the chapter, subject, or topic to be printed. The printer device that prints the output can also be specified. Additional print keywords are available to direct the total number of lines to be printed on a page, the beginning column for the leftmost margin, and print type case. You can also optionally enact print on both sides of the page with dual-sided numbering.

You can also print or suppress print of the detailed table of contents or the topic keyword cross reference.

Target or Distribution source library member ESSPRINT (OS/390), TOOLJCL library member ESSPRINT.S (VSE/ESA), or the ESSPRINT EXEC (VM/ESA) contains the model JCL and key for this utility, and keyword parameter information. You can also access keyword parameter information using the online documentation.

#### 3.1.7.1 Report Output

After executing ESSPRINT, review the Audit Report (shown in Exhibit 3.9). Successful execution produces informative messages that do not require remedial action. If ESSPRINT does not execute successfully, warning and/or error messages appear on the report. Correct any errors and resubmit the job.

See 2.17, “Utilities Option” on page 2-38 for an example of CA-IDMS/SASO printed output.

CA-TOOLS	RELEASE Rnn.nn	CA-STANDARDS ADMINISTRATION SYSTEM ONLINE CA-IDMS/SASO PRINT DISCREPANCY REPORT	DATE mm/dd/yy	TIME hh:mm:ss	PAGE nnnn
PRNT001I-PRINT REQUEST SUCCESSFULLY COMPLETED FOR "SASODN01"					

*Exhibit 3.10: Audit Report for Print Utility (ESSPRINT)*

## Chapter 4. Operations

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This chapter covers CA-IDMS/Standards Administration System Online (CA-IDMS/SASO) operations. It describes the system requirements, printer characteristics, the logical database design of CA-IDMS/SASO, CA-IDMS/SASO internal structures, security implementation, the need to backup your CA-IDMS/SASO database, local mode execution of batch utilities, and printing the online documentation.

## 4.1 CA-IDMS/SASO System Requirements

CA-IDMS/SASO supports these product releases:

- CA-IDMS/DC 15.0.
- CA-IDMS 15.0.

### 4.1.1 Terminal Type

CA-IDMS/SASO can be used from these terminals:

- IBM 3270 terminal (except model 1), including the 3279 color display
- Any other 3270-compatible terminal.



## 4.2 Printer Characteristics

An array of commands are provided that can be included within document text for the purpose of directing printer output. These commands are implemented through a command table so that new features can be added with a minimum of effort and impact to the product.

Upon initial installation of CA-IDMS/SASO, the control character sequence for each of these printer directives is supplied for IMPACT, 6670, and 3800 printers. See Exhibit 4.1 for a list of these characters.

Control characters for additional devices are established using online facilities under the Utilities Option, Printer Configuration.

### 4.2.1 Print Macros (OCL Commands)

The OCL Commands utility gives you the ability to define and maintain print macros specific to your printer device's requirements. You can define a macro by adding a print control verb and specifying the associated hexadecimal print control characters for that verb.

You can then imbed the print control verb anywhere in topic text in the format:

**: print-control-verb**

Where:

***print-control-verb*** — any of the print control verbs shown in Exhibit 4.1 or print control verbs defined by you.

Rules:

- A colon (:) must precede all print control verbs
- All print control verbs must appear in column 1 EXCEPT :¢ (Bold) and :@ (Underline).

When you request a print of the text, the hexadecimal equivalent of the printer control verb is substituted for the verb.

For more information on defining print control verbs, refer to the online documentation for the Printer Configuration utility (3.6).

## 4.2.2 Processing of DEVICE Types for All Printers

For printer device types prefixed with IMPACT, 6670, or 3800 device identifiers specific device processing occurs. If the device-ID prefix is not one of the fully supported types, the device is treated as an IMPACT type. The only exception is that the **//OCL DD** is read for printer control records, and these records are passed through to the device prior to the offload of the manual.

**Note:** For printer devices other than IMPACT, 6670, or 3800, you must specify the **//OCL DD \*** statement in your DEVICE's JCL, followed by printer control statements to instruct your printer to act as an IMPACT printer.

## 4.2.3 Disk/Tape Output Options

In addition to IMPACT, 6670, or 3800 printer support, CA-IDMS/SASO gives you the ability to direct print output to dataset name specifications in JCL text for DISK and TAPE.

You must specify the name of the dataset for output destination on the DSNAME parameter in the JCL text.

These new device types provide a sequential output equivalent of the normal printed CA-IDMS/SASO request without ASA control characters or bolding/underlining.

Any printer device beginning with DISKxxxx or TAPExxxx is processed in this manner.

## 4.2.4 3800 Printer Support

The 3800 printer support requires the following:

- You must use two non-proportional character sets in order to print the CA-IDMS/SASO manual using the 3800 substation.
- Each of the character-set IDs must have the high-order bit set ON. This enables the 3800 automatic underscoring capability.
- One of the character sets should be normal intensity and the other character set should be bold intensity.

For OS/390 the **//MANUAL DD** statement must have the following parameters:

```
CHARS=(normal-set-id,bold-set-id)  
DCB=(RECFM=FBA,OPTCD=J)
```

For VSE/ESA the **//SETPRT** statement must be specified as follows:

```
// SETPRT SYS017, CHARS=(normal-set-id,bold-set-id), DLFT=Y, DCHK=U, TRC=Y
```

Where:

*normal-set-id* — is the character set identifier for the non-bolded text.

*bold-set-id* — is the character set identifier for the bolded text.

Control Characters	Function
:E	Begin the textual line on a new page. Must be placed in column 1.
:¢	Toggle between bold and non-bold for each cent sign (¢) encountered. Must be placed on either side of the string to be highlighted.
:@	Toggle between underlined and non-underlined for each “at” sign (@) encountered. Must be placed on either side of the string to be underlined.
:Sn	Insert n number of blank lines at the current location in the text. Must be placed in column one.
:E NOH	Forces a page eject. Suppresses the printing of a header. Must be placed in column 1.
:CE	Centers all of the data following the command on the line. Must be placed in column 1.
:NS xx	Starts change notation. Marks each line with the hex character   or xx if specified. must be placed in column 1.
:NE	Ends the change notation. Must be placed in column 1.*
:IN +nn -nn	Move (indent) text to the right (+) or left (-). Text indents are cumulative. The left margin remains at the point to which you move it until another :IN is encountered.

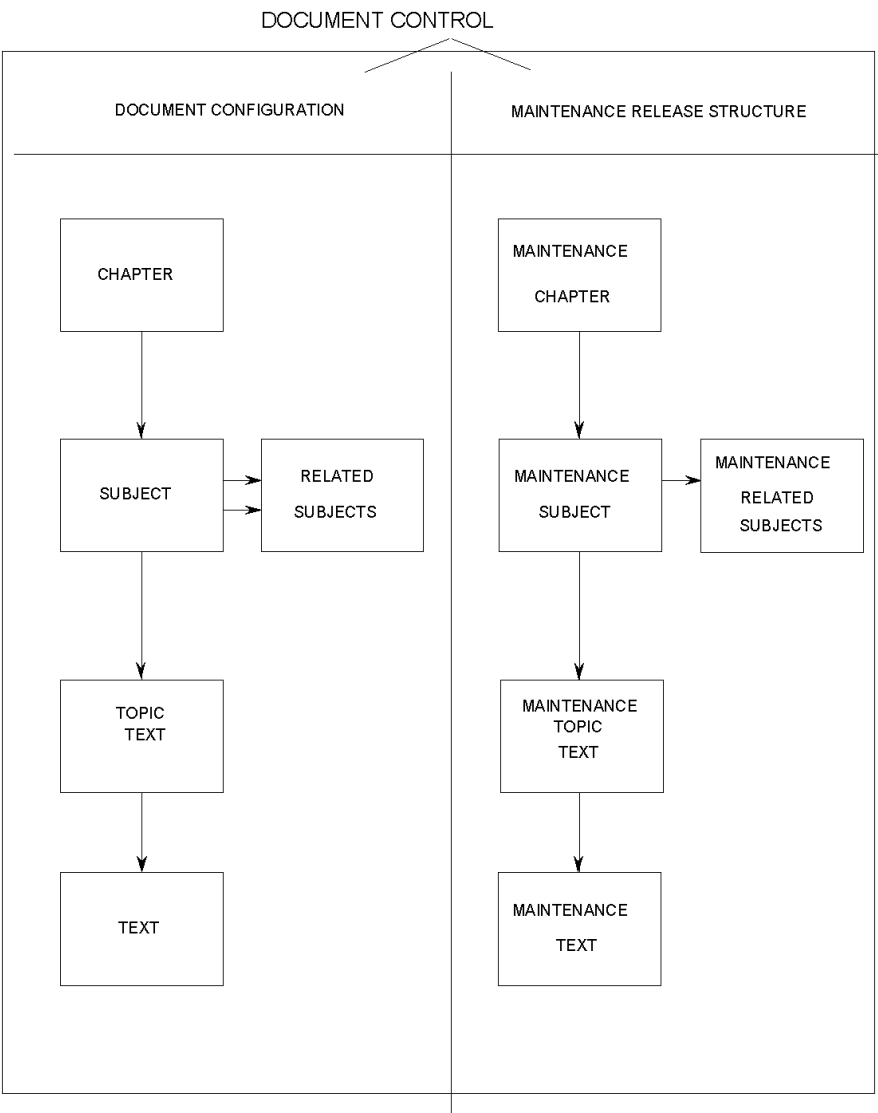
Control Characters	Function
:IM a b c d	<p>Enable the CA-IDMS/SASO/Enforcer interface by inserting the imbed at relevant places in CA-IDMS/SASO text. Must begin in column 1.</p> <p>The imbed is expanded when it is encountered in CA-IDMS/SASO print, browse, and release maintenance offload (ESSMOFF) processing.</p> <p>If the target template is successfully located, a series of 80-byte lines is returned in a conversational manner to the CA-IDMS/SASO browse and print processors.</p> <p>Where:</p> <p>a = a valid dictionary name identifier or a single comma (,) representing the default dictionary. Required.</p> <p>b = a valid Node Name identifier or a single comma (,) representing the default node. Required.</p> <p>c = a valid, entity-level enforcement structure for the indicated dictionary/node combination. Required.</p> <p>d = a valid, template-level enforcement structure for the indicated dictionary/node-entity combination. Required.</p> <p>Rules:</p> <ul style="list-style-type: none"> <li>Each of the four keywords must be separated by a space.</li> <li>You must provide a valid entry or a comma (,) for each.</li> </ul> <p>The template identifier contains imbedded spaces, place it within single quotes.</p> <p>Example:</p> <p>:IM TKIT , ATTRIBUTE 'PRIMARY ATTRIBUTE'</p>

*Exhibit 4.1: Control Characters*

**Note:** Bold (:¢) and Underline (:@) can be placed around the specified strings throughout the text so that phrases are highlighted and underlined. All other characters must be placed in column 1.

### 4.3 Data Structure

The logical database structure of CA-IDMS/SASO is strictly hierarchical (see Exhibit 4.2). This is true for both the primary and maintenance areas. The major difference between the two is in the relationship between subjects and related subjects. In the primary area, a bill of material exists. That is, subject relationships can be determined from subject and related subject lists. In the maintenance area, subject relationships can be determined from subject lists only.



*Exhibit 4.2: CA-IDMS/SASO Data Structure Diagram*

## 4.3.1 Hierarchical Update Tracking

Updates made to structures in the Primary Document area, Release Maintenance area, and Printer Configurations result in changes to the change tracking information (DATE REVISED, TIME REVISED, REVISED BY, etc.).

### 4.3.1.1 Primary Document Update Tracking

If a topic is modified, CA-IDMS/SASO updates the topic, subject, chapter, and document control change tracking information.

If a subject is modified, CA-IDMS/SASO updates the subject, chapter, and document control change information.

If a chapter is modified, CA-IDMS/SASO updates the chapter and document control change information.

Primary document modifications which trigger an update of change tracking information include:

- Editing one or more characters in a topic's text
- Renaming a chapter, subject, topic, or topic keyword
- Deleting, reorganizing, or adding structures where renumbering or compressing occurs
- Applying maintenance to the primary document
- Changing document security class codes, renaming documents, or adding new documents.

You can display change tracking information online in a chapter, subject, related subject, or topic list. Entering the STATS ON|OFF command enables immediate display of tracking information in a list and in a topic text screen.

### 4.3.1.2 Release Maintenance Area Update Tracking

Application of maintenance to the primary document results in a change in tracking information in both areas of the document.

Maintenance changes that trigger an update of change tracking information include:

- Editing one or more characters in the Maintenance topic text updates the topic, subject, chapter, maintenance release structure, and document control change tracking information
- Deleting a maintenance structure updates the maintenance and document control structures change information

- Applying maintenance at the subject level results in updates to the subject, owner chapter, maintenance release structure, and document control change tracking information
- Purging a maintenance release updates document control change tracking information.

You can display change tracking information online in a chapter, subject, related subject, or topic list. Entering the STATS ON|OFF command enables immediate display of tracking information in a list and in a topic text screen.

#### 4.3.1.3 Printer Configuration Update Tracking

Printer configuration additions, modifications, deletions, and JCL text changes result in changes to the change tracking information for the printer device components and the document control structure.

Printer device components include:

- Printer device name, device description, and lines per page
- Printer device printer initialization string
- Printer device OCL commands
- Printer device JCL text.

You can display change tracking information online in the Printer Configuration utility entry screen, in a Printer Device List, and in the OCL Commands List for a printer device using primary and line command specifications.

For more information on displaying change tracking information, refer to the online documentation for the Printer Configuration utility (3.7).

### 4.3.2 Internal Tracking Identifiers

CA-IDMS/SASO uses internal tracking numbers to uniquely identify components of the Standards, Procedures and Guidelines (SP&G) manual supplied by Computer Associates, and to uniquely identify chapters, subjects, and topics you add to your documents using the Add/Insert Structure utility (3.2).

Internal tracking identifiers are assigned at the chapter, subject, and topic levels for all components of a document. Structures contained in the SP&G manual have been given unique identifiers that set your document structures apart from those defined by Computer Associates.

Once internal tracking identifiers are defined, they remain unchanged. Structure modifications, renames, reorganizations, and application of maintenance do not alter internal tracking identifier definitions.

If you delete an existing chapter, subject, or topic from a document, however, the unique tracking identifier initially assigned to that structure is longer be present in your

document or the SP&G manual, and cannot be recreated. To restore SP&G tracking, you would be required to re-upload the SP&G text supplied by Computer Associates, on tape using batch utility ESSULOD. For more information on uploading SP&G text, see Chapter 3, “Batch Utilities” on page 3-1.

### 4.3.2.1 Purpose of Internal Tracking Identifiers

External structure reference identifiers may become altered using CA-IDMS/SASO utility functions. Therefore, unique internal tracking identifiers were created to permanently enable identification of chapters, subjects, and topics.

Internal tracking identifiers are used in the Maintenance Option (4.0) to compare internal identifiers of structures contained in the MAINTENANCE area of a document with the identifiers of structures contained in the PRIMARY area of the same document. See Exhibit 4.2 for a description of the CA-IDMS/SASO data structure.

When internal identifiers existing in both areas of a document, the maintenance is labeled as R-Replace maintenance and overlays the structure contained in the PRIMARY area when applied using the online utility function.

When no match on internal identifiers can be located in both areas, the maintenance is labeled as I-Insert maintenance.

See 2.22, “Maintenance Option” on page 2-60 for information on creating maintenance, maintenance types, and applying maintenance.

### 4.3.2.2 Reviewing Internal Tracking Identifiers

You can review internal tracking identifiers in both areas of a document. Once you display a chapter, subject, or topic list, you can issue the STATS ON command to review internal information about that structure.

Each level of a structure contains its own unique set of internal identifiers. As an example, a subject contains a subject internal identifier and a chapter internal identifier. The chapter internal identifier may not necessarily represent that subject's owner chapter.

The internal tracking identifier of a chapter, subject, or topic consists of:

- Unique internal tracking identifier of the CV established at product installation.
- **Chapter** - the incremental value assigned when the chapter was added to the document. This value starts out at 0 at product installation and can be increased to 65,535. Therefore, 65,535 new chapters can be added to a document.
- **Subject** - the incremental value assigned when the subject was added to the document. This value starts out as 0 at production installation and can be increased to 65,535. Therefore, 65,535 new subjects can be added to a document.



- **Topic** - the incremental value assigned when the topic was added to the document. This value starts out as 0 at product installation and can be increased to 65,535. Therefore, 65,535 new topics can be added to a document.

The next level of internal identifier demonstrates the internal identifier of the structure to which a subject or topic was initially added. As mentioned earlier, these values are never changed:

- **Chapter Level** — Not applicable. The document control structure is the highest level above a chapter.
- **Subject Level** — The chapter identifier for a subject represents the internal ID of the original chapter to which the subject was added.
- **Topic Level** — The subject identifier for a topic represents the internal ID of the original subject to which the topic was added. The chapter identifier for a topic represents the internal ID of the original chapter to which the topic was added.

## 4.4 CA-IDMS/SASO Security

The CA-IDMS/SASO integrated security feature gives you the ability to provide security at the following levels:

- Task
- Document Update
- Document Browse
- Chapter Update
- Chapter Browse.

### 4.4.1 Securing CA-IDMS/SASO Tasks

You can secure the CA-IDMS/SASO tasks shown in Exhibit 4.3 by defining CA-IDMS task category resources for CA-IDMS/SASO. Once task category resource entities have been defined, users can be granted execution privileges to access specific CA-IDMS/SASO functions (CA-IDMS/SASO securable tasks).

Security checking is performed at CA-IDMS/SASO runtime. Task-level security is verified first. Tasks that are not defined to CA-IDMS securityd are accessible by all users.

#### Task Names and Descriptions: SASO

- ESSAMENU — CA-IDMS/SASO Primary Menu
- ESSABENT — Browse Entry Screen
- ESSABCR — Chapter List
- ESSABSR — Subject List
- ESSABTR — Topic List
- ESSABRS — Related Subjects List
- ESSABSA — Subject List by Subject Name Index
- ESSABTA — Topic List by Topic Name Index
- ESSABKA — Topic List by Topic Keyword Index
- ESSAEENT — Edit Entry Screen
- ESSAECR — Chapter List
- ESSAESR — Subject List
- ESSAETR — Topic List
- ESSAERS — Related Subjects List
- ESSAESA — Subject List by Subject Name Index
- ESSAETA — Topic List by Topic Name Index

- ESSAEKA — Topic List by Topic Keyword Index
- ESSAUMNU — Utilities Menu
- ESSAUSEC — Chapter Level Security Screen
- ESSAUSC — Assign Chapter Level Security Screen
- ESSAUSS — Subject List
- ESSAUSR — Related Subjects List
- ESSAUST — Topic List
- ESSAUREN — Rename/Delete Utility
- ESSAURCR — Chapter List
- ESSAURSR — Subject List
- ESSAURTR — Topic List
- ESSAURRS — Related Subjects List
- ESSAUAEN — Add Structure Utility
- ESSAUMEN — Reorganize Utility
- ESSAUSEN — Subject Relator Utility
- ESSAUSCR — Chapter List
- ESSAUSSR — Subject List
- ESSAUSTR — Topic List
- ESSAUSRS — Related Subjects List
- ESSAUDOC — Document Configuration Utility
- ESSAUPEN — Printer Configuration Utility
- ESSAUPTL — Printer Configuration List
- ESSAUPCA — Add Printer Control Directive
- ESSAUPCC — OCL Commands Screen
- ESSAUPRT — Print Request Utility
- ESSAUCHG — Change Structure Statistics Utility
- ESSAUCC — Chapter List
- ESSAUCS — Subject List
- ESSAUCR — Related Subjects List
- ESSAUCT — Topic List
- ESSAMNT — Release Maintenance List
- ESSAMCR — Chapter List
- ESSAMSR — Subject List

- ESSAMTR — Topic List
- ESSAMRS — Related Subjects List
- ESSADOCU — Document Utilities Menu
- ESSADSC — Assign Document Level Security Class
- ESSADUR — Rename/Delete Document Utility
- ESSADUA — Add Document Utility
- ESSADUS — Create Document Updates Utility
- ESSADUD — Add/Copy Document Configurations
- ESSADUP — Add/Copy Printer Configurations
- ESSADSS — String Search Facility
- ESSADOCL — Document List

*Exhibit 4.3: CA-IDMS/SASO Securable Tasks*

### 4.4.2 Securing CA-IDMS/SASO Documents

You can secure specific CA-IDMS/SASO documents by:

- Defining CA-IDMS security resources for document browse and update activity
  - Note:** When creating an activity resource for CA-IDMS/SASO using IDMS internal or external security, the application name for the activity resource should be the CA-IDMS/SASO document name or dbname. These activity resources should be assigned to the user authorized to browse or update these activities.
- Using the online Document Security utility to assign activity number(s) to the document for browse, update, or both
- Granting execution privileges to a user or group for access to the document for browse, update, or both.

Security checking is performed at CA-IDMS/SASO runtime. Task-level security is verified first, followed by document access authorizations. The signed-on user can access only those documents to which they have been granted execution privilege to access in browse or update mode online.

For detailed information on defining document security in CA-IDMS/SASO, access the Document Security Utility (D.0) and refer to the online documentation.

### 4.4.3 Securing CA-IDMS/SASO Document Chapters

You can secure specific chapters of any CA-IDMS/SASO document by:

- Defining CA-IDMS security resources for chapter browse and update activity

**Note:** When creating an activity resource for CA-IDMS/SASO using IDMS internal or external security, the application name for the activity resource should be the CA-IDMS/SASO document name or dbname. These activity resources should be assigned to the user authorized to browse or update these activities.

- Using the online 2.21.1, “Chapter Security” on page 2-42 in a Chapter List, to assign activity number(s) to the chapter for browse, update, or both
- Granting execution privileges to a user or group for access to the chapter(s) for browse, update, or both.

Security checking is performed at CA-IDMS/SASO runtime. Task-level security is verified first, followed by document access authorizations. Chapter security is verified when the signed-on user attempts to browse a chapter or select a chapter for utility functions. The user is able to access only those chapters for which they have been granted access privileges in browse or update mode online.

For detailed information on defining document security in CA-IDMS/SASO, access 2.21.1, “Chapter Security” on page 2-42 and refer to the online documentation.

### 4.4.4 Symbolic Parameter Security

Security is also provided through the use of the &USERID and &PASSWORD symbolic parameters.

If the keywords &USERID or &PASSWORD are encountered anywhere in the job cards or JCL text, the values assigned to these symbolic parameters are substituted in their place at runtime. These values are assigned using the Print Request utility (3.7).

The &PASSWORD symbolic is entered in a darkened screen field and submitted at the time of submission, thus ensuring security integrity.

This feature provides for the security of CA-ACF2 and other security package passwords entered through the job card.

## 4.5 CA-IDMS/SASO Backups

CA-IDMS/SASO can be viewed as a CA-IDMS database application system running on your CA-IDMS/DC system. As such, be sure to backup to tape your CA-IDMS/SASO database in accordance with normal backup procedures for application systems within your company. Repeat the backup process as often as your company standards require.

It is also good practice to backup your load and source libraries as you would other such files within your company.

## 4.6 Migrating the CA-IDMS/SASO Databases

To migrate the text of the CA-IDMS/SASO database from one DC environment to another (database), download the contents of the database and populate the database of the new environment with the downloaded text.

Download the database by using the Download CA-IDMS/SASO Document Structure batch utility (ESSDLOD). This procedure writes the entire contents of the primary structure to a disk file or tape.

Populate another database with the tape or disk output file by using the Upload CA-IDMS/SASO Document Structure batch utility (ESSULOD) and specify the appropriate keyword parameters to either replace an existing structure or populate a new database.

For more information on these utilities, see Chapter 3, “Batch Utilities” on page 3-1.

## 4.7 Executing Batch Utilities in Local Mode

Several utilities perform operations at the document level. If these utilities are performed at the document level, severe loading of the journal files may occur.

In particular, the online Create Document Updates utility (D.3) should never be run at the document level. Consideration should be given to using this utility at the chapter level. Every effort has been made to minimize the effect on the central version (CV), but CPU requirements can be significant.

The following batch utilities may also impact the central version environment:

- ESSULOD
- ESSRLSE
- ESSMLOD

Consideration should be given to local-mode execution of these utilities, especially if disk journals are limited in size.

See the appropriate CA-IDMS manual for information on local-mode access.



## 4.8 CA-IDMS/SASO Customization Macros

Two customization macros are provided with CA-IDMS/SASO which allow you to change various CA-IDMS/SASO runtime options:

The **CA-IDMS/SASO customization macro** gives the system administrator the ability to:

- Load CA-IDMS/SASO online documentation text to a dictionary other than the primary dictionary associated with the CA-IDMS/DC under which CA-IDMS/SASO runs
- Change task code from default of SASO
- Change default document name from SPG
- Supply three default JCL job card lines on the Print Request screen.

The **CA-IDMS/DC SORT subroutine customization macro** gives the system administrator the ability to:

- Specify the amount of main storage and auxiliary storage to be made available to the CA-IDMS/DC SORT subroutine used by CA-IDMS/SASO.
- Indicate how space is to be allocated to buffers at runtime. The allocation of buffers also depends on the record length in a particular sort.

These runtime options can be changed at anytime after initial product installation, either before or after SMP/E ACCEPT processing. See the *IDMS Installation & Maintenance Guide OS/390*, for detailed instructions on processing customization macro changes under SMP/E.

## 4.9 Online Documentation Print Utility

The CA-IDMS Online Documentation Print utility provided with CA-IDMS/SASO allows error messages and other product information to be printed upon request.

Target or Distribution source library member GSIPRINT (OS/390), TOOLJCL library member GSIPRINT.S (VSE/ESA), or the GSIPRINT EXEC (VM/ESA) downloaded from the product installation tape contains the JCL to execute the Online Documentation Print Utility.

The online documentation modules for CA-IDMS/SASO processing are listed in Exhibit 4.4. You can print major function modules, together with subordinate modules, in a single execution of GSIPRINT. You can also print subordinate modules individually.

The printed version of the online documentation is presented one screen per page and includes page reference indexes for screen options. Characters highlighted in the online documentation appear bolded in the printed version.

### Module Names and Descriptions:

- COMMANDS — Generic EDITOR documentation
- GSIHELP — General Service documentation
- ESSABENT — Browse Entry Screen
- ESSACMD — CA-IDMS/SASO Commands
- ESSADOCL — Document List
- ESSADOCU\* — Document Utilities Menu
  - ESSADSC — Assign Document Security Class Utility
  - ESSADUR — Rename/Delete Document Utility
  - ESSADURC — Confirm Document Delete Screen
  - ESSADUA — Add Document Utility
  - ESSADUS — Create Document Updates Utility
  - ESSADUD — Add/Copy Document Configurations Utility
  - ESSADUP — Add/Copy Printer Configurations Utility
  - ESSADSS — String Search Facility
- ESSAEENT — Edit Entry Screen
- ESSAGCR — Generic Chapter List
- COMMANDS — Generic EDITOR documentation
- ESSAGKA — Generic Topic List by Topic Keyword Index
- ESSAGRS — Generic Related Subjects List

- ESSAGSA — Generic Subject List by Subject Name Index
- ESSAGSR — Generic Subject List
- ESSAGTA — Generic Topic List by Topic Name Index
- ESSAGTR — Generic Topic List
- ESSAICPY — Copy Utility
- ESSAID — The ID Command/Screen
- ESSAKEY — PF Key Definition Screen
- ESSAMASN — Update Assignment Screen
- ESSAMCF — Confirm Apply Screen
- ESSAMENU — Primary Tutorial Menu
- ESSAMNT — Release Maintenance List
- ESSAMPUR — Confirm Purge Screen
- ESSMSG — CA-IDMS/SASO Messages
- ESSAREC — CA-IDMS/SASO Recovery Screen
- ESSSHOW — Browse Commands
- ESSASRT — List Sorting Screen
- ESSAUMNU\* — Utilities Menu
  - ESSAUSEC — Chapter Level Security Screen
  - ESSAUREN — Rename/Delete Structure
  - ESSAUAEN — Add Utility
  - ESSAUSEN — Subject Relator Screen
  - ESSAUMEN — Reorganize Utility
  - ESSAUDOC — Document Configuration Utility
  - ESSAUPEN — Printer Configuration Utility
  - ESSAUPRT — Print Request Utility
  - ESSAUCHG — Change Structure Statistics Utility
  - ESSAUCF — Confirm Statistics Change
- ESSAUPCA — Add Printer Control Directive
- ESSAUPCC — OCL Commands Screen
- ESSAUPTI — Printer Device Configuration Information
- ESSAUPTL — Printer Configuration List
- ESSAUPVI — Printer Device/OCL Information
- ESSAURCF — Confirm Structure Delete Screen

- ESSAUSC — Assign Chapter Level Security Class
- ESSBATCH — Batch Utility Parameter Keyword Information
- ESSCTRL — CA-IDMS/SASO Print Control Characters

\*When you request this module for print, you also print the modules subordinate to it (ESSAUSEC through ESSAUCHG). You can also print the subordinate modules individually.

*Exhibit 4.4: Online Documentation Modules for CA-IDMS/SASO*

## 4.10 Online Message Facility

CA-IDMS/SASO allows you to view message text in an online environment.

To access the Message Index screen:

1. Type **M** in the OPTION field of the first online documentation panel for each CA-IDMS/SASO screen.
2. Press the ENTER key.

The Message Index screen is displayed.

To view message text:

1. Type the message number in the INDEX line of the Message Index screen.
2. Press the ENTER key.

The text for that message is displayed.

You can also use the Online Documentation Print utility described above to print the message module ESSMSG, which was added to your dictionary at the time of installation.



# Chapter 5. Messages

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5.1 Message Text . . . . .	5-4
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This chapter describes the messages generated by CA-IDMS/SASO. CA-IDMS/SASO messages are preceded by an alphanumeric code that ends with a letter indicating the severity. The severity code is either:

- Informative — The severity code **I** indicates an informative message. Informative messages are for your information only; no remedial action is required.
- Warning — The severity code **W** indicates a warning. Warning messages report conflicting data or various processing conditions.
- Error — The severity code **E** indicates an error. When CA-IDMS/SASO encounters an error condition, an error message appears on your screen. Error messages report erroneous and conflicting data that require action.

This chapter lists for each message the code, the text, and an explanation.

## 5.1 Message Text

### **CTLD001I SUCCESSFUL UPLOAD OF DOCUMENT CONTROL STRUCTURE**

**Reason:** The CA-IDMS/SASO document control structure has been uploaded into the target central version (CV) without error.

**Action:** None

### **CTLD002E "OBJCVID" IS A SYSTEM RESERVED TRACKING INDICATOR**

**Reason:** A value has been encountered that is reserved for CA-IDMS/SASO tracking indicator assignments.

**Action:** Correct the JCL by specifying a value within ranges 36 through 255 and resubmit.

**Note:** An attempt to assign OBJCVID other than 36-255 would result in unrecoverable system errors.

### **CTLD003E INVALID "SIGNON" VALUE SPECIFIED**

**Reason:** An invalid value has been encountered in the SIGNON statement.

**Action:** Correct the JCL by specifying a valid signon and resubmit.

**Note:** The signon statement is a reserved function for Computer Associates International, Inc.

### **CTLD004E "SIGNON" STATEMENT MUST BE SPECIFIED FOR OBJCVID 0-35**

**Reason:** The SIGNON statement was not located to verify use of OBJCVID ranges 1 through 35.

**Action:** Correct the JCL by specifying a valid signon and resubmit.

**Note:** The signon statement and OBJCVID ranges 1-35 are reserved for Computer Associates International, Inc. tracking indicator assignments. An attempt to assign OBJCVID other than 36-255 would result in unrecoverable system errors.

**CTLD005E ATTEMPTED RELOAD WHEN STRUCTURE IS ALREADY IN PLACE**

**Reason:** An attempt to reinstall the CA-IDMS/SASO document control structure has been made.

**Action:** If the structure is acceptable as loaded, no action is required. If a reload is required, initialize CA-IDMS/SASO area ESS-CTRLD-AREA and resubmit the request.

**DLOD001I SUCCESSFUL DOWNLOAD OF document-name DOCUMENT**

**Reason:** The download utility was successfully executed against the database structure (document) specified in the keyword parameter.

**Action:** None

**DLOD002W ESSDLOD FILE CONTAINS NO CHAPTERS FOR document-name DOWNLOAD**

**Reason:** No chapters were found in the document specified for download execution. The document configuration record (CTRLA type) was the only record written to the down-load file, ESSDLOD.

**Action:** If the structure is acceptable as downloaded, proceed to the upload step.

**DLOD003E THE DOCUMENT CONFIGURATION RECORD FOR document-name IS MISSING**

**Reason:** The database structure specified for download execution has not been loaded.

**Action:** Establish the document configuration or the printer configuration and chapters, subjects, topics, and topic text using online functions or execute the batch upload utility (ESSULOD) using a non-empty upload file.

**DLOD004E DATABASE BIND FAILED FOR document-name**

**Reason:** For central version (CV) job execution, the document-name (DBNAME) specified in the keyword parameter has no equivalent in the database name table for the CV being accessed on the SYSCTL card. If local mode, the database name table has not been punched and link edited into the appropriate batch load library.

**Action:** Verify that a DBNAME equivalent to the document-name entered on the process input card exists in the CV or in the load library specified in your JCL.

**FILE905E GSSFILE RETURNED AN ERROR DURING v,FILE=v, CODES  
nnnn**

**Reason:** The indicated file function could not be performed with the specified file.

**Action:** See Exhibit 5.1 to determine the reason the error occurred and appropriate action.

**IDMS001E PROGRAM "a" ABORTED WITH STATUS OF "b" AT  
SEQUENCE "c"**

**Reason:** An unexpected CA-IDMS status error occurred during CA-IDMS/SASO processing in program "a". The invalid status is presented in "b", and the CA-IDMS call sequence is presented in "c".

**Action:** Refer to the error status values in the *CA-IDMS Messages and Codes Guide*. If the reason for the error is not apparent, contact Computer Associates Technical Support.

**MLOD001I MAINTENANCE release-id SUCCESSFULLY INSTALLED FOR  
document-name**

**Reason:** Maintenance corresponding with the release identifier indicated in this message has been successfully installed in the database associated with document-name.

**Action:** None

**MLOD002E RELEASE FILE EMPTY**

**Reason:** The maintenance release offload file, RELEASE, is empty. The probable cause is incorrect JCL specification.

**Action:** Correct maintenance upload JCL and resubmit.

**MLOD003E INVALID RECORD TYPE OF x FOUND INSTEAD OF x**

**Reason:** An unrecoverable error has occurred in the CA-IDMS/SASO maintenance release data structure offload file.

**Action:** Contact Computer Associates Technical Support and tell them the message number indicated in this message.

**MLOD004E ATTEMPTED REPLACE WHEN MAINTENANCE release-id  
DOES NOT EXIST FOR document-name**

**Reason:** An attempt to reload (REPLACE) a maintenance release has been made for a release identifier that does not exist in the database structure specified for utility operation.

**Action:** Correct the JCL by removing the REPLACE option from the process input statements and resubmit the request.

**MLOD005E ATTEMPTED RELOAD WHEN MAINTENANCE release-id IS  
ALREADY IN PLACE FOR document-name**

**Reason:** An attempt to reload a maintenance release has been made for a release identifier that has already been uploaded into the database structure.

**Action:** If the structure is acceptable as loaded, no action is required. If a reload is required, specify the REPLACE option in the process input statements in the JCL, and resubmit.

**MLOD006E THE DOCUMENT CONFIGURATION RECORD FOR document-  
name IS MISSING**

**Reason:** The database structure specified for maintenance release upload execution has not been loaded.

**Action:** Establish the document configuration or printer configuration and chapters, subjects, topics, and topic text using online functions or execute the batch upload utility (ESSULOD) using a non-empty upload file.

**MLOD007E DATABASE BIND FAILED FOR document-name**

**Reason:** For central version (CV) job execution, the document-name (DBNAME) specified in the keyword parameter has no equivalent in the database name table for the CV being accessed on the SYSCTL card. If local mode, the database name table has not been punched and link edited into the appropriate batch load library.

**Action:** Verify that a DBNAME equivalent to the document- name entered on the process input card exists in the CV or in the load library specified in your JCL.

**MLOD008E UNEXPECTED COMPARATOR RETURN OF return-code**

**Reason:** During text comparison in maintenance upload processing, an unexpected error code was returned. The values for the return codes are as follows:

0000Text groups match

0004One group is empty

0008Parameter error

0016Internal failure

**Action:** Contact Computer Associates Technical Support with the message and return code.

**MOFF001I SUCCESSFUL OFFLOAD AND PRINT OF MAINTENANCE  
release-id FROM document-name**

**Reason:** The maintenance release requested for offload has been successfully extracted from the document-name indicated in this message.

**Action:** None

**MOFF002E MAINTENANCE RELEASE release-id WAS NOT FOUND IN THE  
document-name DOCUMENT**

**Reason:** The maintenance release identifier specified for maintenance offload execution could not be located in the document-name indicated in this message.

**Action:** Correct maintenance offload JCL by specifying the correct maintenance release identifier and/or document-name and resubmit the request.

**MOFF003E PRINTER DEVICE device-type WAS NOT FOUND IN THE  
document-name DOCUMENT**

**Reason:** The printer device specified in the PRINTER parameter could not be located in the document-name indicated in this message.

**Action:** Correct the JCL by specifying a printer that is defined in the database structure for document-name or access CA-IDMS/SASO options 3.6 and/or D.5 to establish the printer device type. Resubmit the request.

**MOFF004E DATABASE BIND FAILED FOR document-name**

**Reason:** For central version (CV) job execution, the document-name (DBNAME) specified in the keyword parameter has no equivalent in the database name table for the CV being accessed on the SYSCTL card. If local mode, the database name table has not been punched and link edited into the appropriate batch load library.

**Action:** Verify that a DBNAME equivalent to the document-name entered on the process input card exists in the CV or in the load library specified in your JCL.

**MOFF005E THE DOCUMENT CONFIGURATION IS MISSING FOR document-name**

**Reason:** The database structure specified for maintenance release offload execution has not been loaded.

**Action:** Establish the document configuration or printer configuration and chapters, subjects, topics, and topic text using online functions or execute the batch upload utility (ESSULOD) to install the CA-IDMS/SASO database structure.

**MOFF006E NEED EITHER "M" OR "U" FOR CASE**

**Reason:** An invalid value has been encountered in the CASE process input statement.

**Action:** Correct the JCL by specifying the correct value for CASE, U or M (U = upper, M = Mixed). "M" is the default.

**NKWP001E UNRECOGNIZABLE MAJOR KEYWORD**

**Reason:** The major keyword underscored by asterisks (\*\*\*\*\*) in the Audit Report is misspelled or is in error and cannot be processed.

**Action:** Correct the spelling of the keyword and resubmit the job.

**NKWP002E DUPLICATE MINOR KEYWORD ENTERED**

**Reason:** The minor keyword underscored by asterisks (\*\*\*\*\*) in the Audit Report has already been entered on the parameter statement underscored.

**Action:** Delete the duplicate minor keyword phrase and resubmit the job.

**NKWP003E AN EQUAL SIGN (=) AND VALUE MUST FOLLOW THE  
KEYWORD**

**Reason:** The required equal sign and value after the keyword are missing. The cause is incorrect JCL specification.

**Action:** Enter an equal sign at the location underscored by an asterisk (\*) in the Audit Report followed by an appropriate value for the parameter. Resubmit the job.

**NKWP005E MISSING RIGHT PARENTHESIS; PHRASE TERMINATED**

**Reason:** A set of open and closed parenthesis is required.

**Action:** Enter a right parenthesis to enclose the phrase or list, then resubmit the job.

**NKWP006E REPEATED RIGHT PARENTHESIS; PHRASE TERMINATED**

**Reason:** The last phrase on this statement is a list enclosed in parenthesis that ends with a comma. The next statement entered, however, does not continue the list.

**Action:** Supply a continuation card and resubmit the job.

**NKWP007E MISSING CONTINUATION CARD**

**Reason:** The previous statement ended with a comma, but this statement begins with a major keyword.

**Action:** Supply a continuation card and resubmit the job.

**NKWP008E PRIORITY MUST CONTAIN NO MORE THAN 500 VALUES**

**Reason:** You supplied more than 500 record types and/or record names in the priority list.

**Action:** Correct and resubmit the job.

**NKWP009E VALUE MUST BE xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx**

**Reason:** The value underscored by an asterisk (\*) in the Audit Report is incorrect for the keyword.

**Action:** Supply the appropriate value specified in the message and resubmit the job.



**NKWP010E KEYWORD PHRASES NOT SEPARATED BY COMMA**

**Reason:** Each keyword phrase must be separated by a comma.

**Action:** Supply a comma at the location underscored by an asterisk (\*) in the Audit Report and resubmit the job.

**NKWP011E UNRECOGNIZABLE MINOR KEYWORD**

**Reason:** The minor keyword underscored by asterisks (\*\*\*\*\*) in the Audit Report is misspelled or is in error and was not processed.

**Action:** Correct the spelling of the minor keyword and resubmit the job.

**NKWP012E MINOR KEYWORD OMITTED**

**Reason:** A minor keyword was omitted at the location underscored by an asterisk (\*) in the Audit Report.

**Action:** Enter the missing minor keyword and resubmit the job.

**NKWP015E THESE KEYWORDS MUST BE SPECIFIED:**

XXXXXXXXXXXXXXXXXXXXXXX

**Reason:** The minor keyword(s) listed in the message was omitted. Processing cannot continue unless the keyword(s) shown is entered.

**Action:** Supply the missing keyword(s) and resubmit the job.

**NKWP018E MISSING VALUE NEEDED XXXXXXXXXXXXXXXXXXXXXXXXXX**

**Reason:** A keyword was entered without a value. The acceptable values are listed in the variable portion of the error message.

**Action:** Enter the correct value at the location underscored by an asterisk(\*) in the Audit Report and resubmit the job.

**NKWP019E VALUE ENTERED PREVIOUSLY**

**Reason:** The value underscored by asterisks (\*\*\*\*\*) on the Audit Report was already entered in the list. This parameter cannot be processed unless you supply two different values.

**Action:** Correct the value and resubmit the job.

**NKWP020E VALUE MUST BE ASCENDING**

**Reason:** The value underscored by asterisks (\*\*\*\*\*) on the Audit Report must be in ascending numerical sequence from the previous value on the list.

**Action:** Rearrange the values in the list in ascending sequence and resubmit the list.

**NKWP021E VALUE MUST BE DESCENDING**

**Reason:** The value underscored by asterisks (\*\*\*\*\*) on the Audit Report must be in descending numerical sequence from the previous value in the list.

**Action:** Rearrange the values in the list in descending sequence and resubmit the job.

**NKWP024E SECOND-LEVEL PRIORITY MUST CONTAIN AT LEAST ONE  
VALUE**

**Reason:** A list or sublist cannot be empty. It must contain at least one valid record type for the record name.

**Action:** Insert one or more record types or record names in the priority statement at the location underscored by an asterisk (\*) in the Audit Report.

**NKWP027E SECOND-LEVEL PRIORITY MUST CONTAIN NO MORE THAN  
10 VALUES**

**Reason:** You supplied more than 10 record types and/or record names in a single second level priority list. The eleventh entry is underscored by an asterisk (\*) in the Audit Report.

**Action:** Break the second-level-priority list into several second-level priority lists and resubmit the job.

**NKWP050E GSSNKWP INTERNAL ERROR-NOTIFY COMPUTER ASSOCI-  
ATES PRODUCT SUPPORT**

**Reason:** An unrecoverable error has been detected.

**Action:** Only the indicated operating systems are supported. Contact Computer Associates Technical Support.

**NKWP051E ERROR OCCURRED DURING CALL OF xxxxxxxx - GSSCALL  
RETURN CODE IS nn**

**Reason:** A module call processor error occurred.

**Action:** Contact Computer Associates Technical Support.

**NKWP052E ERROR OCCURRED DURING LOAD OF xxxxxxxx - GSSCALL  
RETURN CODE IS nn**

**Reason:** A module load processor error occurred.

**Action:** Contact Computer Associates Technical Support.

**NKWP053E ERROR OCCURRED DURING WRITE OF xxxxxxxx - GSSPRINT  
RETURN CODE IS nn**

**Reason:** An error occurred during a call of the printer module.

**Action:** Contact Computer Associates Technical Support.

**NKWP061E DD STATEMENT MISSING FOR DDNAME:xxxxxxx**

**Reason:** A JCL DD card was not supplied.

**Action:** Correct the JCL and resubmit the job.

**NKWP062E LOGICAL UNIT NOT ASSIGNED:xxxxxxx**

**Reason:** An ASSGN card was not supplied.

**Action:** Correct the JCL and resubmit the job.

**NKWP063E SYSIPTLRECL MUST BE 80**

**Reason:** A parameter file with an LRECL other than 80 was supplied.

**Action:** Create a parameter file with an LRECL of 80 and resubmit the job.

**NKWP064E ERROR OCCURRED DURING OPEN OF xxxxxxxx FILE -  
GSSFILE RETURN CODE IS n1,n2,n3,n4**

**Reason:** The file handler is unable to open the file.

**Action:** See Exhibit 5.1 for an explanation and appropriate action for the return codes indicated.

**NKWP065E ERROR OCCURRED DURING READ OF xxxxxxxx FILE -  
GSSFILE RETURN CODE IS n1,n2,n3,n4**

**Reason:** The file handler is unable to read the file.

**Action:** See Exhibit 5.1 for an explanation and appropriate action for the return codes indicated.

**NKWP066E ERROR OCCURRED DURING CLOSE OF xxxxxxxx FILE -  
GSSFILE RETURN CODE IS n1,n2,n3,n4**

**Reason:** The file handler is unable to close the file.

**Action:** See Exhibit 5.1 for an explanation and appropriate action for the return codes indicated.

**NKWP080W SKIPPING UNTIL NEXT RECOGNIZABLE STATEMENT**

**Reason:** Because of a previous error, the phrase(s) underscored by the capital letter X in the Audit Report has not been processed.

**Action:** None

**NKWP081W SKIPPING UNTIL NEXT RECOGNIZABLE MINOR KEYWORD**

**Reason:** Because of a previous error, the values(s) underscored by the capital letter X in the Audit Report has not been processed.

**Action:** None

**NKWP091I INPUT PARAMETER STATEMENT**

**Reason:** An input parameter statement has been read. The entire 80 byte image is displayed. Columns 1-72 will be processed.

**Action:** None

**NKWP092I CONTINUATION STATEMENT**

**Reason:** The parameter statement continues a previous statement entered.

**Action:** None

**NKWP093I COMMENT STATEMENT**

**Reason:** The parameter statement contains an asterisk (\*) as the first non-blank character. This indicates that this is a comment statement and will not be processed.

**Action:** None

**NKWP094I END OF PARAMETER INPUT**

**Reason:** All parameters that were entered have been read and processed.

**Action:** None

**NKWP095I BLANK PARAMETERS STATEMENT**

**Reason:** The parameter statement contains only blanks in columns 1-72 and will not be processed.

**Action:** Correct and resubmit the job.

**NKWP096E UNMATCHED APOSTROPHE. NEED xxxxxxxxx**

**Reason:** A value was entered that contains an odd number of apostrophes. Literal values must begin and end with single apostrophes. To represent a single apostrophe within a literal, you must enter two apostrophes. The acceptable values are listed in the variable portion of the error message.

**Action:** Correct the value underscored by asterisks (\*\*\*\*) and resubmit the job.

**NKWP097E BAD LITERAL FORMAT. NEED xxxxxxxx**

**Reason:** A literal value was entered with improperly placed apostrophes. Literal values must begin and end with single apostrophes. To represent a single apostrophe with a literal, you must enter two apostrophes. The acceptable values are listed in the variable portion of the error message.

**Action:** Correct the value underscored by asterisks (\*\*\*\*\*) and re-submit the job.

**OBTD001W THE CA-IDMS/SASO DOCUMENT CONTROL STRUCTURE HAS NOT BEEN UPLOADED**

**Reason:** The CA-IDMS/SASO document control structure has not been established.

**Action:** Execute the batch utility, ESSCTLD, to load the database structure that houses CA-IDMS/SASO document control information.

**OBTD002W document-name DOCUMENT HAS NOT BEEN ADDED TO THE CA-IDMS/SASO DOCUMENT CONTROL STRUCTURE**

**Reason:** The document-name indicated in this message has not been added to the CA-IDMS/SASO database structure.

**Action:** Access CA-IDMS/SASO option D.2 to establish document information.

**OBTD003E INVALID PARAMETER LIST SUPPLIED TO ESSBOBTD**

**Reason:** An invalid parameter list was passed to the document control edit module.

**Action:** Contact Computer Associates Technical Support and tell them the message number indicated in this message.

**OSYS001E THE OPERATING SYSTEM OF THE CV operating-system IS UNSUPPORTED FOR JOB SUBMIT**

**Reason:** The JCL for a printer device could not be submitted to the operating system.

**Action:** Check the “operating system” value returned in the message against the following for OS/390 JCL:

- OS/390
- SVS
- VS1
- CMS

or the following for VSE/ESA JCL:

- VSE/ESA

Only the indicated operating systems are supported.

**PBUF001E INVALID PARAMETER LIST SUPPLIED TO ESSBPBUF**

**Reason:** An internal print buffer request received an invalid parameter list.

**Action:** Contact Computer Associates Technical Support and tell them the number indicated in the message.

**PBUF002E THE NUMBER OF PARAMETERS TO ESSBPBUF MUST BE 2 OR  
4**

**Reason:** An invalid number of parameters were passed to the internal buffer print module.

**Action:** Contact Computer Associates Technical Support and tell them the number indicated in the message.

**PBUF003E INVALID PRINT REQUEST OF "f" PASSED TO ESSBPBUF  
ROUTINE**

**Reason:** An invalid request parameter was encountered in the print buffer routine.

**Action:** Contact Computer Associates Technical Support and tell them the message number indicated in the message.

**PBUF004E BODY REQUEST REQUIRES 4 PARMS IN ESSBPBUF**

**Reason:** An invalid parameter list was encountered during print of the document body.

**Action:** Contact Computer Associates Technical Support and tell them the message number indicated in the message.

**PBUF005E NUMBER OF LINES TO PRINT EXCEEDS 62**

**Reason:** The number of lines to be printed on a page exceeds the maximum allowable number.

**Action:** Contact Computer Associates Technical Support with the message number indicated in the message.

**PBUF006E IMPROPER OR MISSING DIRECTIVE FOR DEVICE x DURING  
PAGE EJECT**

**Reason:** The indicated device requires an EJECT OCL command.

**Action:** Access CA-IDMS/SASO option 3.6 for the indicated device and specify an EJECT command string.

**PBUF007E IMPROPER OR MISSING DIRECTIVE FOR DEVICE x DURING  
LINE DELIMIT**

**Reason:** The indicated device requires a LINE DELIMIT OCL command.

**Action:** Access CA-IDMS/SASO option 3.6 for the indicated device and specify a LINE DELIMIT command string.

**PBUF008E IMPROPER OR MISSING DIRECTIVE FOR DEVICE x DURING  
BOLD/FONT CHANGE**

**Reason:** The indicated device requires a BOLD/FONT CHANGE OCL command.

**Action:** Access CA-IDMS/SASO option 3.6 for the indicated device and specify a BOLD/FONT CHANGE command string.

**PBUF009E UNSUPPORTED DEVICE TYPE OF x**

**Reason:** A device type has been specified that cannot be supported by CA-IDMS/SASO print facilities.

**Action:** Contact Computer Associates Technical Support to determine the requirements of this device type.

**PBUF010E IMPROPER OR MISSING DIRECTIVE FOR DEVICE x DURING  
UNDERLINING**

**Reason:** The indicated device requires an UNDERLINE OCL command.

**Action:** Access CA-IDMS/SASO option 3.6 for the indicated device and specify an UNDERLINE command string.

**PBUF011E INVALID DIRECTIVE x FOR DEVICE y DURING HEADER  
PROCESS**

**Reason:** The OCL command represented by “x” is missing for device “y”. Because of this, the formatted page header could not be completed.

**Action:** Access CA-IDMS/SASO function 3.6 and correct the OCL for the indicated header directive.



**PBUF012E INVALID DIRECTIVE x FOR DEVICE y DURING FOOTER PROCESS**

**Reason:** The OCL command represented by “x” is missing for device “y”. Because of this, the formatted page footer could not be completed.

**Action:** Access CA-IDMS/SASO function 3.6 and correct the OCL for the indicated footer directive.

**PBUF013E COMMAND TABLE OVERFLOW FOR DEVICE device-name**

**Reason:** A batch print request has failed because the indicated printer device-name has an excessive number of printer macros.

**Action:** Contact Computer Associates Technical Support with information about the overflow.

**PRNT001I PRINT REQUEST SUCCESSFULLY COMPLETED FOR document-name**

**Reason:** The print request was successfully completed using the database structure associated with the document-name (DBNAME) as the source.

**Action:** None

**PRNT002E PARAMETER RECORD MISSING FROM SYSIPT**

**Reason:** The first record in the printer interface file was not the CA-IDMS/SASO directive record. The user did not use option 3.7 of CA-IDMS/SASO to request the print, or an invalid record was inserted at the top of the SYSIPT file.

**Action:** If the JCL has been incorrectly modified, correct the JCL using CA-IDMS/SASO option 3.6. Otherwise, contact Computer Associates Technical Support and tell them the message number indicated in the message.

**PRNT003E INVALID TABLE OF CONTENTS OPTION OF x**

**Reason:** An invalid value was transmitted in the CA-IDMS/SASO print interface record. This value must be Y or N.

**Action:** Contact Computer Associates Technical Support and tell them the message number indicated in the message.

**PRNT004E INVALID TOPICAL INDEX OPTION OF x**

**Reason:** An invalid value was transmitted in the CA-IDMS/SASO print interface record. This value must be Y or N.

**Action:** Contact Computer Associates Technical Support and tell them the message number indicated in the message.

**PRNT005E INVALID PRINT EXTENT OPTION OF x**

**Reason:** An invalid value was transmitted in the CA-IDMS/SASO print interface record. This value must be G or S.

**Action:** Contact Computer Associates Technical Support and tell them the message number indicated in the message.

**PRNT006E DEVICE TYPE x UNDEFINED TO CA-IDMS/SASO DATABASE**

**Reason:** An undefined device type was transmitted in the CA-IDMS/SASO printer directive record. Edits made online should have trapped this error.

**Action:** Contact Computer Associates Technical Support and tell them the message number indicated in the message.

**PRNT007E THE DOCUMENT CONFIGURATION IS MISSING**

**Reason:** The control record (CTRLA) for the CA-IDMS/SASO database could not be located. A print request has been issued prior to CA-IDMS/SASO database installation.

**Action:** Establish the document configuration or printer configuration and chapters, subjects, topics, and topic text using online functions or execute the batch upload utility (ESSULOD) to install the CA-IDMS/SASO database and resubmit the request.

**PRNT009E INVALID CONTROL STREAM FOR SELECTIVE PRINT REQUEST**

**Reason:** A SELECTIVE print request was indicated, but no selection records follow the printer directive record.

**Action:** Contact Computer Associates Technical Support and tell them the message number indicated in the message.

**PRNT010E INVALID 2-UP option of x**

**Reason:** An invalid value was passed in the printer directive record. This value must be Y or N.

**Action:** Contact Computer Associates Technical Support and tell them the message number indicated in the message.

**PRNT011E INVALID CASE MODE OPTION OF "x"**

**Reason:** An invalid value was transmitted in the CA-IDMS/SASO print interface record. This value must be M or U.

**Action:** Contact Computer Associates Technical Support and tell them the message number indicated in the message.

**PRNT012E RANGE VALUE MUST BE GREATER THAN ZERO FOR THIS OPTION TYPE**

**Reason:** A batch print request has been submitted with invalid RANGE value.

**Action:** Correct the RANGE value and resubmit.

**PRT0001E SRCCHAPTER IS MISSING**

**Reason:** You specified a SRCSUBJECT and/or SRCTOPIC for a batch print request, but the SRCCHAPTER is missing.

**Action:** Correctly supply the SRCCHAPTER, SRCSUBJECT, and SRCTOPIC and rerun the job.

**PRT0002E SRCCHAPTER AND SRCSUBJECT ARE MISSING**

**Reason:** You supplied the SRCTOPIC field, but the SRCCHAPTER and SRCSUBJECT are missing.

**Action:** Correctly supply the SRCCHAPTER, SRCSUBJECT, and SRCTOPIC and rerun the job.

**PRT0003E SRCCHAPTER AND SRCTOPIC ARE MISSING**

**Reason:** You supplied the SRCSUBJECT field, but the SRCCHAPTER and SRCTOPIC are missing.

**Action:** Correctly supply the SRCCHAPTER, SRCSUBJECT, and SRCTOPIC and rerun the job.

**PRT0004E SRCSUBJECT IS MISSING**

**Reason:** You supplied the SRCCHAPTER and SRCTOPIC fields, but the SRCSUBJECT is missing.

**Action:** Correctly supply the SRCCHAPTER, SRCSUBJECT, and SRCTOPIC and rerun the job.

**PRT0005E THE DOCUMENT CONFIGURATION IS MISSING FOR document**

**Reason:** The DOCUMENT specified in a print request does not exist as a CA-IDMS/SASO document in the central version (CV) of the job.

**Action:** Correct the DOCUMENT selected for print and rerun the job.

**PRT0006E SRCCHAPTER chapter-id WAS NOT FOUND IN THE document  
DOCUMENT**

**Reason:** The indicated chapter reference does not exist in the DOCUMENT selected for print.

**Action:** Correct the CHAPTER selected for print and rerun the job.

**PRT0007E SRCSUBJECT subject-id WAS NOT FOUND IN THE document  
DOCUMENT**

**Reason:** The indicated subject reference does not exist in the DOCUMENT selected for print.

**Action:** Correct the SUBJECT selected for print and rerun the job.

**PRT0008E SRCTOPIC topic-id WAS NOT FOUND IN THE document DOCUMENT**

**Reason:** The indicated topic reference does not exist in the DOCUMENT selected for print.

**Action:** Correct the TOPIC selected for print and rerun the job.

**PRT0009E DATABASE BIND FAILED FOR document**

**Reason:** The document selected for print cannot be bound as a DBNAME.

**Action:**

1. Review the database name table for the indicated document
2. Correct the DBNAME table
3. Rerun the job.

**PVRB001E INVALID VERB x IN TEXT y**

**Reason:** Column 1 contains a colon (:) but the following verb string is undefined to CA-IDMS/SASO print processing. The entire line of text (y) is displayed as part of the error.

**Action:** Correct the text and resubmit the request.

**PVRB002E INVALID PARM IN VERB x IN TEXT y**

**Reason:** A print directive starting in column 1 with a colon (:) is followed by an invalid parameter.

**Action:** Correct the verb parameter and resubmit the request.

**PVRB003E MISSING IMBED STRUCTURE IN TEXT text-record**

**Reason:** A CA-IDMS/ENFORCER imbed statement was encountered in the indicated text record, but the referenced DICTIONARY, NODE, ENTITY, and TEMPLATE could not be located in the CA-IDMS/ENFORCER database.

**Action:** Correct the CA-IDMS/SASO text that contains the imbed to reference a valid CA-IDMS/ENFORCER structure.

**PVRB004E INVALID CALL FOR IMBED IN TEXT text-record**

**Reason:** A CA-IDMS/ENFORCER imbed command was encountered in the indicated text record, but processor call failed with an unexpected abort.

**Action:** Contact Computer Associates Technical Support with this message.

**PVRB005E DD WORKFIL MISSING FOR DOCUMENTATION INTERFACE**

**Reason:** A CA-IDMS/ENFORCER imbed activated the documentation interface, but the WORKFIL DD statement is missing.

**Action:** Review the prototype statement for the WORKFIL DD in ESSPRINT and add it to the JCL used to execute this job.

**PVRB006E DATABASE ERROR IN TEXT text-record**

**Reason:** A CA-IDMS/ENFORCER imbed in the indicated test-record initiated a documentation interface request, but the CA-IDMS/ENFORCER database is missing or improperly installed.

**Action:** Review the CA-IDMS/ENFORCER database installation.

**RLSE001E SRCCHAPTER IS MISSING**

**Reason:** The SRCSUBJECT parameter has been specified without a SRCCHAPTER directive.

**Action:** Correct the JCL by specifying the SRCCHAPTER card in the process input statements and resubmit.

**RLSE002E SRCCHAPTER AND SRCSUBJECT ARE MISSING**

**Reason:** The SRCTOPIC parameter has been specified without SRCSUBJECT and SRCCHAPTER directives.

**Action:** Correct the JCL by specifying the SRCSUBJECT and SRCCHAPTER cards in the process input statements and resubmit.

**RLSE003E SRCCHAPTER AND SRCTOPIC ARE MISSING**

**Reason:** The SRCSUBJECT parameter has been specified without SRCTOPIC and SRCCHAPTER directives.

**Action:** Correct the JCL by specifying the SRCTOPIC and SRCCHAPTER cards in the process input statements and resubmit.

**RLSE005E THE DOCUMENT CONFIGURATION IS MISSING FOR document-name**

**Reason:** The database structure associated with the document- name in this message has not been loaded.

**Action:** Establish the document configuration or printer configuration and chapters, subjects, topics, and topic text using online functions or execute the batch upload utility (ESSULOD).

**RLSE006E SRCCHAPTER chapter-id WAS NOT FOUND IN THE document-name DOCUMENT**

**Reason:** The chapter identifier specified on the SRCCHAPTER process input card could not be located on the database associated with the document-name indicated in this message.

**Action:** Correct the JCL by specifying the correct chapter reference identifier and resubmit.

**RLSE007E SRCSUBJECT subject-id WAS NOT FOUND IN THE document-name DOCUMENT**

**Reason:** The subject identifier specified on the SRCSUBJECT process input card could not be located on the database associated with the document-name indicated in this message.

**Action:** Correct the JCL by specifying the correct subject reference identifier and resubmit.

**RLSE008E SRCTOPIC topic-id WAS NOT FOUND IN THE document-name DOCUMENT**

**Reason:** The topic identifier specified on the SRCTOPIC process input card could not be located on the database associated with the document-name indicated in this message.

**Action:** Correct the JCL by specifying the correct topic reference identifier and resubmit.

**RLSE009E RLSE009E DATABASE BIND FAILED FOR document-name**

**Reason:** For central version (CV) job execution, the document-name (DBNAME) specified in the keyword parameter has no equivalent in the database name table for the CV being accessed on the SYSCTL card. If local mode, the database name table has not been punched and link edited into the appropriate batch load library.

**Action:** Verify that a DBNAME equivalent to the document-name entered on the process input card exists in the CV or in the load library specified in your JCL.

**RLSE010E NEED EITHER "Y" OR "N" FOR OBJDELETE**

**Reason:** An invalid value has been encountered in the OBJDELETE process input statement.

**Action:** Correct the JCL by specifying the correct value for OBJDELETE, Y or N. (N is the default.)

**SASO001E COMMAND command-name IS NOT ACTIVE FOR THIS FUNCTION**

**Reason:** The command is not active for the current screen.

**Action:** Check the command line entry. If a command abbreviation has been specified, enter the full command, and press the ENTER key. Otherwise, a PF key has been pressed which is defined with the inactive command. In this case, enter the KEYS command to check the correct PF key/command assignment. If this fails, refer to the appropriate section in the user guide or the online HELP facility.



**SASO002E THE PF KEY PRESSED IS NOT ACTIVE FOR THIS FUNCTION**

**Reason:** The PF key pressed does not have an associated command which is valid for the current screen.

**Action:** Enter the KEYS command at the command line. When the PF key definition screen appears, check the PF key for correct command assignment. Otherwise, the PF key does not have an assigned function.

**SASO003E SELECT OPTION option IS NOT VALID FOR THIS FUNCTION**

**Reason:** The option entered at the command line does not have an associated function.

**Action:** Check the command line entry against the options listed on the screen.

**SASO004E AN ERROR OCCURRED DURING RECOVERY PROCEDURES**

**Reason:** A severe internal error has occurred during CA-IDMS/SASO recovery processing.

**Action:** Contact Computer Associates Technical Support with the message number indicated in the message.

**SASO005E TOPIC topic-id SPECIFIED FOR RENAME COULD NOT BE FOUND**

**Reason:** The topic-ID specified with the line command (R)ename in the selection list no longer exists.

**Action:** Enter the END command and reaccess the topic list. Choose another topic for rename.

**SASO006E REQUESTED UTILITY OPERATION CANNOT BE PERFORMED ON CHAPTER chapter-id**

**Reason:** A protected chapter (A)ppendices, or (G)lossary, has been specified for utility operation.

**Action:** Respecify chapter for utility function.

**SASO007E SUBJECT subject-id SPECIFIED FOR RENAME COULD NOT BE FOUND**

**Reason:** The subject-ID specified with the line command (R)ename in the selection list no longer exists.

**Action:** Enter the END command and reaccess the subject list. Choose another subject for rename.

**SASO008E UNABLE TO TRANSFER TO ca-idms/saso-level USING = COMMAND**

**Reason:** The transfer level (browse=1, edit=2, maintenance=4) specified is incorrect.

**Action:** Check the command entry (PF key assignment or the command line entry) for an incorrect specification.

**SASO009E THE HIGHER LEVEL QUALIFIER OF THE REFERENCE ID IS MISSING**

**Reason:** The chapter reference identifier, the subject reference identifier, or both are missing.

**Action:** Specify the missing reference identifier(s) and retry access.

**SASO010E REQUESTED UTILITY OPERATION CANNOT BE PERFORMED ON SUBJECT subject-id**

**Reason:** A protected section, (A)ppendices and installed subjects 1-6 or (G)lossary and any installed subjects, has been specified for utility operation.

**Action:** Respecify chapter/subject-ID for utility function.

**SASO011E CHAPTER LIST ACCESS FAILED - NO CHAPTERS WERE LOCATED**

**Reason:** The database structure does not contain any chapters.

**Action:** Contact your DBA or the technician responsible for CA-IDMS/SASO document maintenance.

**SASO012E HIGHLIGHTED INPUT FIELDS ARE IN ERROR**

**Reason:** Field specification(s) on the screen are incorrect.

**Action:** Check literal information which may describe the correct value options or refer to the tutorial assistance for that function.

**SASO013E CHAPTER chapter-id SPECIFIED FOR RENAME COULD NOT BE FOUND**

**Reason:** The chapter-ID specified with the line command (R)ename in the selection list no longer exists.

**Action:** Enter the END command and reaccess the chapter list. Choose another chapter for rename.

**SASO014E LINE COMMAND line-command IS NOT VALID FOR THIS FUNCTION**

**Reason:** An invalid line command has been specified.

**Action:** Refer to the appropriate section of the user guide or to the tutorial for valid line commands for the function.

**SASO015E SUBJECT LIST ACCESS FAILED - CHAPTER chapter-id WAS NOT FOUND**

**Reason:** Subjects cannot be listed because the chapter access reference has been deleted, renumbered, or no longer exists.

**Action:** Enter the END command and reaccess the chapter list or respecify the chapter-ID at the entry screen.

**SASO016E SUBJECT LIST ACCESS FAILED FOR CHAPTER chapter-id - NO SUBJECTS WERE LOCATED**

**Reason:** Subjects cannot be listed because the subjects have been deleted, renumbered, or do not exist for the chapter reference.

**Action:** If the target access is for a specific subject, and the subject name is known, specify the subject name in the Browse or Edit Entry screen. For a match on the name specification, check the number assignment.

**SASO017E REQUESTED UTILITY OPERATION CANNOT BE PERFORMED  
ON TOPIC topic-id**

**Reason:** A protected section, (A)ppendices and installed subjects 1-6 including all associated topics, or (G)lossary and any installed subjects/topics, has been specified for utility operation.

**Action:** Respecify chapter/subject/topic-ID for utility function.

**SASO018E CURSOR IS AT A MISSING, REQUIRED FIELD**

**Reason:** A required value has not been supplied.

**Action:** Enter a value at the cursor position.

**SASO019E oper-system-JCL FOR device-type IS ALREADY DEFINED**

**Reason:** A request to (A)dd a printer device which already exists.

**Action:** Respecify printer device for (A)dd function.

**SASO020E oper-system-JCL FOR device-type PRINTER IS NOT DEFINED to  
CA-IDMS/SASO**

**Reason:** A request to display detail associated with a printer device which has not been added to the list of devices.

**Action:** Display the list of devices currently installed and use line commands to access more detail.

**SASO021E PF KEY SUBSTITUTION IS DISABLED UNTIL SIGNON IS COM-  
PLETED**

**Reason:** Use of a PF key function has been requested prior to provision of the user identifier/password.

**Action:** Enter the user identifier and password before pressing a PF key function other than "ENTER".

**SASO022E TOPIC LIST ACCESS FOR subject-id FAILED - CHAPTER  
chapter-id WAS NOT FOUND**

**Reason:** Topics cannot be listed because the chapter-ID has been deleted, renumbered or does not exist.

**Action:** Enter the END command and reaccess the subject list or respecify the chapter-ID at the Entry screen.

**SASO023E TOPIC LIST ACCESS FOR subject-id FAILED - SUBJECT  
subject-id WAS NOT FOUND**

**Reason:** Topics cannot be listed because the subject access reference has been deleted, renumbered, or does not exist.

**Action:** Enter the END command and reaccess the subject list or respecify the subject-ID at the Entry screen.

**SASO024E TOPIC LIST ACCESS FOR subject-id FAILED - NO TOPICS  
WERE LOCATED**

**Reason:** Topics cannot be listed because they have been deleted, renumbered, or do not exist for the subject.

**Action:** If the target access is for a specific topic, and the topic name or topic keyword is known, specify the topic or keyword name in the Edit or Browse Entry screen. For a match on the name specification, check the number assignment.

**Note:** If the target access is for a specific subject, and the subject name is known, specify the subject name in the Edit or Browse Entry screen. For a match on the name specification, check the number assignment.

**SASO025E THE "IMPACT" DEVICE TYPE CANNOT BE ERASED**

**Reason:** The "IMPACT" printer device type is a fixed device for all installations and cannot be deleted from the printer list.

**Action:** Respecify device type for deletion.

**SASO026E CHAPTER LIST ACCESS FAILED - RELEASE ID release-id WAS NOT FOUND**

**Reason:** The database structure which houses the maintenance release for access no longer exists.

**Action:** Return to the previous screen and reaccess the release. If this fails, contact your DBA or the technician responsible for document maintenance release and upload applications.

**SASO027E RELATORS LIST ACCESS FOR reference-id FAILED - CHAPTER chapter-id WAS NOT FOUND**

**Reason:** Related subjects cannot be listed because the chapter access reference has been deleted or renumbered.

**Action:** Enter the END command and reaccess the topic or subject list display from which relators access was requested. Retry access to the related subjects list.

**SASO028E SUBJECT LIST ACCESS FAILED - RELEASE ID release-id WAS NOT FOUND**

**Reason:** The database structure which houses the maintenance release for access no longer exists.

**Action:** Return to the Maintenance Release List screen and reaccess. If this fails, contact your DBA or the technician responsible for document maintenance release uploads and applications.

**SASO029E RELATORS LIST ACCESS FOR reference-id FAILED - SUBJECT subject-id WAS NOT FOUND**

**Reason:** Related subjects cannot be listed because the subject access reference has been deleted or renumbered.

**Action:** Enter the END command and reaccess the topic or subject list display from which relators access was requested. Retry access to the related subjects list.

**SASO030E RELATORS LIST ACCESS FOR reference-id FAILED - NO REL SUBJS WERE LOCATED**

**Reason:** Related subjects cannot be listed because there are no subject relationships.

**Action:** Enter the END command and reaccess the topic or subject list display from which relators access was requested. Retry access to the related subjects list.

**SASO031E NO MATCH ON NAME SPECIFICATION: name-entry**

**Reason:** A subject, topic, or keyword name has been specified which does not exist.

**Action:** Retry access specifying the first few characters of the name. If this fails, set caps mode to ON and retry access. If the name is represented in mixed case, specify the first character(s) exactly as it appears in the document and retry access.

**SASO032E OCL REVIEW FAILED - DEVICE device-type HAS BEEN DELETED**

**Reason:** A request to review the optical character language associated with a printer device cannot be completed because the device has been deleted from the printer configuration.

**Action:** Enter the END command and reaccess the device list or respecify the printer device at the Entry screen.

**SASO033E CHARACTERS OTHER THAN 0-9 OR A-F FOUND**

**Reason:** The printer initialization entry contains non-hexadecimal characters.

**Action:** Specify only hexadecimal values 0-9 or A-F.

**SASO034E UNEVEN NUMBER OF CHARACTERS IN HEX STRING**

**Reason:** The printer initialization entry does not contain an even number of hexadecimal characters in the string specification.

**Action:** Specify groups of two (2) hexadecimal characters in the initialization string.

**SASO035E ENTER REQUIRED FIELD AT THE CURSOR POSITION**

**Reason:** A required field entry has not been supplied at the cursor position on the screen.

**Action:** Enter the required value in the field at the cursor position.

**SASO036E UTILITY OPERATION FAILED - NO CHAPTERS WERE LOCATED**

**Reason:** The utility function requested could not be executed because no chapter records could be located in the standards manual area.

**Action:** Contact your DBA or the technician responsible for manual maintenance.

**SASO037E TOPIC LIST ACCESS FAILED - RELEASE ID release-id WAS NOT FOUND**

**Reason:** Topics cannot be listed because the maintenance release-ID cannot be located.

**Action:** Return to the Maintenance Release List screen and retry access. If this fails, contact person(s) responsible for maintenance releases.

**SASO038E UTILITY OPERATION FAILED - NO SUBJECTS WERE LOCATED FOR CHAPTER chapter-id**

**Reason:** The utility function requested could not be executed because the chapter contains no subjects or subjects have been renumbered.

**Action:** Try access to the subject list display in browse or edit for the chapter-ID. Refer to the subject list display for the chapter-ID access reference to verify subject number assignments.

**SASO039E "COPY" FAILED - SPECIFICATION OF ONE TEXT GROUP FOR COPY IS REQUIRED**

**Reason:** Values were supplied in more than one text group for the copy function.

**Action:** Check each text group for entries and select only one group for the copy function.

**SASO040E UTILITY OPERATION FAILED - CHAPTER OTHER THAN "A" OR 1-999 FOUND**

**Reason:** A non-numeric chapter other than (A)ppendices has been requested for a subject or topic add utility function.

**Action:** Choose another chapter for utility function.

**SASO041E INTERNAL ERROR OCCURRED DURING COMPRESSION - COMPRESSION UNAPPLIED**

**Reason:** An internal processing error occurred during execution of a utility function.

**Action:** Contact Computer Associates Technical Support and tell them the message number indicated in the message.



**SASO042I TOPIC topic-id COPIED**

**Reason:** The topic-ID specified for the copy function was copied into the current edit session member.

**Action:** Continue the current edit session or end/save/cancel the member being edited.

**SASO043E MORE THAN 200 SELECTIVE PRINT RECORDS ENCOUNTERED**

**Reason:** During selective print, an internal database key table was exceeded.

**Action:** Contact Computer Associates Technical Support and tell them the message number indicated in the message.

**SASO044E NO PROTOTYPE JCL FOR DEVICE device-type**

**Reason:** During submission of a CA-IDMS/SASO print request, a device has been specified which contains no JCL.

**Action:** Add JCL for the indicated printer device using option 3.6 of the CA-IDMS/SASO online utilities.

**SASO045E NO OUTSTANDING MAINTENANCE RELEASES**

**Reason:** No releases have been uploaded into the release maintenance database structure.

**Action:** If a release maintenance upload has been executed, check report output from the job for further error reporting. Otherwise, choose another option from the CA-IDMS/SASO menu.

**SASO046E STRUCTURE TYPE FOR UTILITY OPERATION NOT FOUND IN THE PARAMETER LIST**

**Reason:** During a utility operation, an internal error occurred which prevented execution of the utility.

**Action:** Exit and reenter the CA-IDMS/SASO system. Retry the utility operation previously requested. If this fails, contact Computer Associates Technical Support and tell them the message number indicated in the message.

**SASO047E APPLY UTILITY ESSSAPPU RECEIVED AN INVALID REQUEST  
OF request-type**

**Reason:** An internal error occurred. The request type passed to maintenance module, ESSSAPPU, was not (R)elease, (C)hapter, (S)ubject, or (T)opic.

**Action:** Exit and reenter the CA-IDMS/SASO system. Retry the utility operation previously requested. If this fails, contact Computer Associates Technical Support and tell them the number indicated in the message.

**SASO048E DATABASE ACCESS FAILURE IN MAINTENANCE FOR  
REQUEST OF request-type**

**Reason:** An internal error occurred during a request to (A)pply or (D)eleate an entire maintenance release, or a single chapter, subject or topic.

**Action:** Exit and reenter the CA-IDMS/SASO system. Retry the utility operation previously requested. If this fails, contact Computer Associates Technical Support and tell them the message number indicated in the message.

**SASO049I USER CANCELLED THE CURRENT MAINTENANCE APPLY**

**Reason:** During confirmation of a request to (A)pply release maintenance, the request was cancelled.

**Action:** Retry the (A)pply request or choose another release level for review and application procedures.

**SASO050E ONLY A PORTION OF THE request-type LEVEL MAINTENANCE  
WAS APPLIED**

**Reason:** During a request to (A)pply release maintenance, the CANCEL command was entered at the Confirm Deletion, or Maintenance Assignment prompt that resulted in partial application.

**Action:** Access the release maintenance chapter, subject, and topic list to review the structures applied or deleted.

**SASO051E UTILITY OPERATION FAILED - SUBJECT OTHER THAN 1-999  
FOUND**

**Reason:** During a utility operation, a non-numeric subject reference was found.

**Action:** Specify a numeric subject-ID.

**SASO052E UTILITY OPERATION FAILED - SUBJECT OTHER THAN 7-999  
FOUND FOR CHAP (A)**

**Reason:** A protected section, (A)ppendices and installed subjects 1-6 has been specified for utility operation.

**Action:** Respecify the subject-ID to other than 1-6.

**SASO053E UTILITY OPERATION FAILED - TOPIC OTHER THAN 0-999  
FOUND**

**Reason:** A non-numeric topic-ID has been specified for utility operation.

**Action:** Specify a numeric topic-ID.

**SASO054E UTILITY OPERATION FAILED - SUBJECT subject-id WAS NOT  
FOUND FOR CHAPTER chapter-id**

**Reason:** A subject-ID has been deleted, renumbered, or does not exist for the chapter-ID.

**Action:** Refer to the subject list display for the chapter-ID access reference to verify subject number assignments.

**SASO055E UTILITY OPERATION FAILED - CHAPTER chapter-id WAS NOT  
FOUND**

**Reason:** Request for utility function cannot be completed because the chapter-ID has been deleted, renumbered or does not exist.

**Action:** Refer to the chapter list display in browse and edit for chapter number assignments.

**SASO056E UTILITY OPERATION FAILED - TOPIC topic-id WAS NOT  
FOUND FOR SUBJECT subject-id**

**Reason:** Request for utility function cannot be completed because the topic-ID has been deleted, renumbered or does not exist.

**Action:** Reaccess the topic list display for the chapter/subject-ID to verify/refresh number assignments.

**SASO057E THE SUBJECT LEVEL QUALIFIER OF THE REFERENCE ID IS MISSING**

**Reason:** Request for utility function cannot be completed because the object of the operation has not been fully specified.

**Action:** Specify the chapter/subject level qualifier for utility function.

**SASO058E "RELATE TO" REFERENCE IDENTIFIERS FOR (R)ELATE FUNCTION ARE MISSING**

**Reason:** During execution of line command (r)elate, the object of the operation was found to be missing.

**Action:** Return to the Utilities screen and specify the "Relate To" chapter/subject level qualifier. Access the subject list and retry the (r)elate function.

**SASO059E SUBJECT subject-id IS ALREADY RELATED TO SUBJECT subject-id**

**Reason:** The utility operation was halted because the subject relationship already exists.

**Action:** Specify another subject for utility function.

**SASO060E SUBJECT subject-id COULD NOT BE LOCATED FOR (R)ELATE FUNCTION**

**Reason:** Request for utility function could not be completed because the object subject-ID has been deleted or renumbered.

**Action:** Enter the END command and reaccess the subject list.

**SASO061E SUBJECT RELATOR CHAIN BROKEN - SUBJECT subject-id WAS NOT FOUND**

**Reason:** Utility function for a related subject cannot be completed because subject interrelationships have not been properly chained together.

**Action:** Enter the END command and reaccess the related subjects list. If this fails, contact Computer Associates Technical Support and tell them the message number indicated in the message.

**SASO062E RELATED SUBJECT `subject-id` FOR (D)ELETE FUNCTION WAS NOT FOUND**

**Reason:** The related subject specified with the line command (d)delete in the related subjects list no longer exists. The subject relationship cannot be deleted because it has already been deleted or assigned a new number.

**Action:** Enter the END command and reaccess the related subjects list.

**SASO063 HIGHLIGHTED STRUCTURE REFERENCE(S) COULD NOT BE LOCATED**

**Reason:** A utility operation could not be completed because the structure reference identifier (chapter, subject, or topic) was not found.

**Action:** Respecify the structure reference(s).

**SASO064E TOPIC TEXT ACCESS FAILED - INVALID PARAMETER LIST**

**Reason:** An internal error occurred during access to the topic text.

**Action:** Enter the END command and reaccess the topic list or respecify the topic-ID at the Entry screen. If this fails, contact Computer Associates Technical Support and tell them the message number indicated in the message.

**SASO065E TOPIC `topic-id` TEXT ACCESS FAILED - CHAPTER `chapter-id` WAS NOT FOUND**

**Reason:** Access to the topic text failed because the chapter-ID has been deleted, renumbered or does not exist.

**Action:** Enter the END command and reaccess the topic list or specify the chapter-ID at the Entry screen.

**SASO066E TOPIC `topic-id` TEXT ACCESS FAILED - SUBJECT `subject-id` WAS NOT FOUND**

**Reason:** Access to the topic text failed because the subject-ID has been deleted, renumbered or does not exist.

**Action:** Enter the END command and reaccess the topic list or respecify the subject-ID at the Entry screen.

**SASO067E TOPIC topic-id TEXT ACCESS FAILED - TOPIC topic-id WAS NOT FOUND**

**Reason:** Access to the topic text failed because the topic-ID has been deleted, renumbered or does not exist.

**Action:** Enter the END command and reaccess the topic list or respecify the topic-ID at the Entry screen.

**SASO068E APPLY TO REFERENCE reference-id FAILED - Maintenance-level reference-id INVALID OR MISSING**

**Reason:** During maintenance assignment, the chapter, subject, or topic reference specified for the (A)pply function could not be found in the primary area of the database.

**Action:** Respecify the structure reference(s) for assignment.

**SASO069E TOPIC topic-id TEXT ACCESS FAILED - RELEASE ID release-id NOT FOUND**

**Reason:** Access to the topic text failed because the maintenance release-ID no longer exists.

**Action:** Return to the previous screen and reaccess. If this fails, contact your DBA, or the technician responsible for document maintenance release uploads and applications.

**SASO070I RECOVERY SUCCESSFUL**

**Reason:** An uncontrolled exit from the CA-IDMS/SASO system has successfully been recovered upon reentry into the system.

**Action:** None

**SASO071E JCL ACCESS FAILED - INVALID PARAMETER LIST**

**Reason:** An internal error occurred during access to the printer device JCL.

**Action:** Enter the END command and reaccess the printer device list or respecify the device at the Entry screen. If this fails, contact Computer Associates Technical Support and tell them the message number indicated in the message.

**SASO072E GSIUPLOW MODULE ERROR MESSAGE: module-error-message**

**Reason:** An internal error has occurred during a profile change of upper/lower case.

**Action:** Exit and reenter the CA-IDMS/SASO system. Retry modifications of caps setting. If this fails, contact Computer Associates Technical Support and tell them the message number indicated in the message.

**SASO073E ESAMnnnn - INVALID PARAMETER LIST**

**Reason:** During open/write of the text source area, an invalid parameter list was encountered which halted processing.

**Action:** Exit and reenter the CA-IDMS/SASO system. Retry the previous command or access. If this fails, then contact Computer Associates Technical Support and tell them the message number indicated in the message.

**SASO074E ESAMnnnn - ILLEGAL CALL (PUT BEFORE OPEN)**

**Reason:** During source text manipulation, an illegal call was executed which discontinued processing.

**Action:** Exit and reenter the CA-IDMS/SASO system. Retry previous command or access. If this fails, then contact Computer Associates Technical Support and tell them the message number indicated in the message.

**SASO075E ESAMnnnn - I/O ERROR VVVV OCCURRED**

**Reason:** During the manipulation of source text, an input/output error occurred.

**Action:** Retry previous command or access. If this fails, exit and reenter the CA-IDMS/SASO system. Retry previous command or access. If this too fails, then contact Computer Associates Technical Support and tell them the message number indicated in the message.

**SASO076E ESAMnnnn - UNEXPECTED RETURN CODE WHILE CREATING THE SOURCE TEXT AREA**

**Reason:** During writes of the source text area, an unexpected error occurred.

**Action:** Retry previous command or access. If this fails, exit and reenter the CA-IDMS/SASO system. Retry previous command or access. If this too fails, then contact Computer Associates Technical Support and tell them the message number indicated in the message.

**SASO077E ESAMnnnn - END OF FILE REACHED (BEYOND BOTTOM)**

**Reason:** During source text area reads, a premature end of file condition was encountered.

**Action:** Retry previous command or access. If this fails, exit and reenter the CA-IDMS/SASO system. Retry previous command or access. If this too fails, then contact Computer Associates Technical Support and tell them the message number indicated in the message.

**SASO078E command-entry ERROR - INVALID PARM LIST**

**Reason:** An internal error occurred during command processing.

**Action:** Enter the CANCEL command and reaccess the text, respecify the command-entry. If this fails, exit and enter the CA-IDMS/SASO system. Retry previous access and command. If this too fails, then contact Computer Associates Technical Support and tell them the message number indicated in the message.

**SASO079E COMMAND command-entry NOT ACTIVE FOR BROWSE**

**Reason:** The command entered at the command line is not active for a browse mode.

**Action:** Continue browsing text or enter the END command to exit the browse mode.

**SASO080I TOPIC topic-id SAVED**

**Reason:** Changes made to text during current edit session have been saved.

**Action:** Continue edit session.

**SASO081E TOO MANY PARAMETERS**

**Reason:** There are no parameters defined for the command entered.

**Action:** Respecify the command at the command line without parameters.

**SASO082E command-entry ERROR - CHAPTER chapter-id NOT FND**

**Reason:** The chapter-ID has been deleted or renumbered.

**Action:** Enter the CANCEL command and reaccess the text. Respecify the command-entry.



**SASO083E command-entry ERROR - SUBJECT subject-id NOT FND**

**Reason:** The subject-ID has been deleted or renumbered.

**Action:** Enter the CANCEL command and reaccess the text. Respecify the command-entry.

**SASO084E command-entry ERROR - TOPIC topic-id NOT FND**

**Reason:** The topic-ID has been deleted or renumbered.

**Action:** Enter the CANCEL command and reaccess the text. Respecify the command-entry.

**SASO085E RELATORS LIST ACCESS FAILED - RELEASE ID release-id WAS NOT FOUND**

**Reason:** Related subjects cannot be listed because the maintenance release identifier cannot be found.

**Action:** Enter the END command and reaccess the subject list. Retry access to the related subjects list. If this fails, contact person(s) responsible for document maintenance release applications.

**SASO086E command-entry ERROR -DEVICE device-type NOT FND**

**Reason:** The printer device has been deleted.

**Action:** Enter the CANCEL command and reaccess the printer device list or respecify the device-type at the Entry screen.

**SASO087E command-entry ERROR - ID-release-id NOT FND**

**Reason:** The maintenance release identifier cannot be found.

**Action:** Enter the CANCEL command and reaccess the text. Retry command-entry.

**SASO088E command-entry ERROR - CHAP chapter-id DELETED/APPLD**

**Reason:** The chapter-ID maintenance release has been deleted or applied.

**Action:** Enter the CANCEL command to exit the text display.

**SASO089E command-entry ERROR - SUBJ subject-id DELETED/APPLD**

**Reason:** The subject-ID maintenance release has been deleted or applied.

**Action:** Enter the CANCEL command to exit the display.

**SASO090E command-entry ERROR - TOPIC topic-id DELETED/APPLD**

**Reason:** The topic-ID maintenance release has been deleted or applied.

**Action:** Enter the CANCEL command to exit the display.

**SASO091E TOPIC topic-id TEXT ACCESS FAILED - CHAPTER chapter-id DELETED/APPLIED**

**Reason:** Access to the topic text failed because the chapter-ID has been deleted or applied.

**Action:** Return to the maintenance chapter list display and check the apply status for chapter-ID.

**SASO092E TOPIC topic-id TEXT ACCESS FAILED - SUBJECT subject-id DELETED/APPLIED**

**Reason:** Access to the topic text failed because the subject-ID has been deleted or applied.

**Action:** Return to the maintenance subject list display and check the apply status for subject-ID.

**SASO093E TOPIC topic-id TEXT ACCESS FAILED - TOPIC topic-id DELETED/APPLIED**

**Reason:** Access to the topic text failed because the topic-ID has been deleted or applied.

**Action:** Return to the maintenance topic list display and check the apply status for topic-ID.

**SASO094I oper-system-JCL FOR device-type PRINTER SAVED**

**Reason:** Source text changes made during this edit session have been saved.

**Action:** Continue edit session.

**SASO095I oper-system-JCL FOR device-type PRINTER COPIED**

**Reason:** The printer device-type specified for the copy function was copied into the current member being edited.

**Action:** Continue the current edit session or end/save the member being edited.

**SASO096E IF ANY LINE NUMBER IS ENTERED, BOTH LINE NUMBERS MUST BE ENTERED**

**Reason:** Only the first and/or last relative line number was specified.

**Action:** Enter both first and last line numbers or bypass relative line number specifications.

**SASO097E THE "FIRST LINE" ENTERED IS GREATER THAN "LAST LINE" SPECIFICATION**

**Reason:** The first line number specified is of a greater value than the last line number.

**Action:** Enter a first line number which is less than the last line.

**SASO098I END-OF-FILE REACHED BEFORE "LAST LINE" last-line-number**

**Reason:** The copy function was completed. The last line specified, however, was not found due to the end of file being reached before the last line specification.

**Action:** Continue the current edit session or end/save the member being edited.

**SASO099E END-OF-FILE REACHED BEFORE "FIRST LINE" first-line-number**

**Reason:** The first line number was not located. The end of the file was reached prior to reaching the first line number.

**Action:** Exit from the current edit session and browse/edit the member for copy function in order to obtain the sequence numbers. Otherwise, bypass relative line specifications.

**SASO100E RECOVERY TO THE PREVIOUS DISPLAY COULD NOT BE PERFORMED**

**Reason:** A display cannot be recovered for redisplay.

**Action:** None

**SASO101I BROWSE HAS BEEN REQUESTED FOR AN EMPTY TOPIC**

**Reason:** The topic selected to be browsed has no text.

**Action:** Select another topic.

**SASO102E TOPIC topic-reference TEXT ACCESS FAILED - TOPIC topic-reference IS IN USE**

**Reason:** The topic selected is currently being edited.

**Action:** Select another topic.

**SASO103E operating-system-JCL FOR device-type PRINTER IS IN USE**

**Reason:** The JCL for the selected device is currently being edited.

**Action:** Select another device.

**SASO104E DATABASE BIND FAILED FOR "document-name"**

**Reason:** An attempt has been made to access a document for which a partial installation has occurred.

**Action:** The document control structure has been added, but the database name table entry and database areas have not. See the *CA-IDMS Installation and Maintenance Guide* for more information.

**SASO105I PURGE/DELETE OF MAINTENANCE CANCELLED BY USER**

**Reason:** The user chose to cancel the delete of a maintenance entity through the Confirm Delete screen.

**Action:** None

**SASO106E SEVERE TRANSIENT ERROR IN ESSADUP**

**Reason:** A system internal error occurred during a Printer Configuration copy operation.

**Action:** Contact Computer Associates Technical Support and tell them the message number indicated in this message.

**SASO107E THE CA-IDMS/SASO DOCUMENT CONTROL STRUCTURE IS NOT DEFINED**

**Reason:** An attempt has been made to access CA-IDMS/SASO, but only a partial installation has occurred.

**Action:** The required database area containing document control information is missing. Review the installation member ESSCTLD and consult the user guide on multiple document installation.

**SASO108E NO DOCUMENTS ARE DEFINED FOR CA-IDMS/SASO**

**Reason:** An attempt has been made to access CA-IDMS/SASO, but only a partial installation has occurred.

**Action:** No documents have been entered into the control structure. Review the installation member ESSCTLD and consult the user guide on multiple document installation.

**SASO109E NO MATCH ON DOCUMENT NAME SPECIFICATION:  
"document-name"**

**Reason:** An attempt has been made to access a document which is not defined to CA-IDMS/SASO.

**Action:** Correct the document name specification or enter blanks or a partial document name to display a document list. If the specification is correct, and the document has not yet been added to CA-IDMS/SASO, add the document using option D.2 or contact the individual responsible for document maintenance.

**SASO110E ADD UTILITY ESSOBTT RECEIVED AN INVALID REQUEST  
OF x**

**Reason:** A system internal error has occurred during document processing.

**Action:** Contact Computer Associates Technical Support and tell them the message number indicated in this message.

**SASO111I "document-name" HAS BEEN ADDED TO THE CA-IDMS/SASO  
CONTROL STRUCTURE**

**Reason:** A document has been successfully added.

**Action:** None

**SASO112I FUNCTION SUCCESSFULLY COMPLETED**

**Reason:** The current maintenance function completed without error.

**Action:** None

**SASO113I CONFIGURATION RECORD FOR "document-name" SUCCESS-  
FULLY UPDATED**

**Reason:** A document configuration has been successfully added or modified.

**Action:** None

**SASO114E THE DOCUMENT CONFIGURATION FOR "document-name" IS  
MISSING**

**Reason:** A document name has been specified as the source of a modify or add operation, or as the target of a modify operation, and it does not currently exist.

**Action:** The erroneous document name(s) will be highlighted. Correct the document name and retry the transaction or access CA-IDMS/SASO option 3.5 and/or D.4 to establish a document configuration for the document name indicated in this message.

**SASO115W UTILITY FUNCTION ALTERED STRUCTURE REFERENCE(S)**

**Reason:** Automatic renumbering of entities has occurred as a result of changes due to entity deletion, reconfiguration, or addition.

**Action:** None

**SASO116E "document-name" ALREADY EXISTS - DUPLICATES ARE NOT  
ALLOWED:**

**Reason:** An attempt has been made to add a document, but the document is already defined.

**Action:** Specify another document name for addition.

**SASO117E REQUESTED UTILITY OPERATION CANNOT BE PERFORMED  
ON "document-name"**

**Reason:** An attempt has been made to delete the SPG document or the current document as selected from the main menu.

**Action:** The SPG document may not be deleted. If the current document from menu selection must be deleted, return to the main menu, specify another document as the current document, and return to this function to process the original target of deletion.

**SASO118E "document-name" IS IN USE - UTILITY OPERATION NOT  
ALLOWED**

**Reason:** An attempt has been made to perform a utility operation on the current document as selected from the main menu.

**Action:** If the requested utility operation must be performed on the indicated document, return to the main menu, specify another document as the current document, and return to this function to process the original document.

**SASO119I DELETE OF DOCUMENT "document-name" CANCELLED BY  
USER**

**Reason:** A document deletion was terminated from the Confirm Delete screen.

**Action:** None

**SASO120I DELETE OF STRUCTURE REFERENCE CANCELLED BY USER**

**Reason:** An entity deletion was terminated from the Confirm Delete screen.

**Action:** None

**SASO121I PRINTER CONFIGURATION FOR DEVICE "device-name"  
ADDED/REPLACED IN "document-name"**

**Reason:** Printer configuration components were successfully processed for the indicated document and device.

**Action:** None

**SASO122I REQUEST FOR RELEASE "release-id" IN DOCUMENT  
"document-name" COMPLETE**

**Reason:** A request to derive maintenance for the indicated transaction has completed successfully. For the online function, this message will appear after exit from the CA-IDMS/SASO system.

**Action:** None

**SASO123E maintenance-level SEQUENCE ERROR IN ESS@DUSB**

**Reason:** An internal sequence error has occurred during maintenance creation at the chapter, subject, or topic maintenance level.

**Action:** Contact Computer Associates Technical Support and tell them the message number indicated in this message.

**SASO124E REFERENCE ID CONVERSION FAILURE FOR ID "reference-id"  
IN ESS@DUSB**

**Reason:** An invalid reference identifier was found in maintenance creation.

**Action:** Contact Computer Associates Technical Support and tell them the message number indicated in this message.

**SASO125E MASH TABLE OVERFLOW IN ESS@DUSB**

**Reason:** An internal table was exceeded during maintenance creation.

**Action:** Contact Computer Associates Technical Support and tell them the message number indicated in this message.

**SASO126E EMPTY TRANSIENT FILE IN ESS@DUSB**

**Reason:** A severe internal error occurred during maintenance creation.

**Action:** Contact Computer Associates Technical Support and tell them the message number indicated in this message.

**SASO127E SEVERE ERROR ENCOUNTERED DURING DELETE PHASE**

**Reason:** A severe internal error occurred during maintenance creation.

**Action:** Contact Computer Associates Technical Support and tell them the message number indicated in this message.



**SASO128I REQUEST FOR RELEASE "release-id" IN DOCUMENT "document-name" DERIVED NO MAINTENANCE**

**Reason:** The indicated maintenance request resulted in no maintenance. This is caused when the source and target entities are exactly identical.

**Action:** Select another entity or document for maintenance comparison.

**SASO129E ESSSOBTD RECEIVED AN INVALID DOCUMENT NAME OF "document-name"**

**Reason:** A severe internal error has occurred.

**Action:** Contact Computer Associates Technical Support and tell them the message number indicated in this message.

**SASO130E THIS MAINTENANCE MUST BE APPLIED AT THE maintenance-level LEVEL**

**Reason:** The maintenance (chapter or subject level) was created by Customization or by the CA-IDMS/SASO release 1.0 Add Utility and release 2.0 Maintenance Creation.

**Action:** If the maintenance was created by Customization, apply the maintenance at the indicated level. If maintenance was created by the release 1.0 Add Utility and release 2.0 Maintenance Creation, delete the maintenance. Run installation member ESSFIXR against the source document and recreate the maintenance.

**SASO131I MAINTENANCE REQUEST INITIATED**

**Reason:** The online maintenance creation utility runs as a background task allowing the user's terminal to be freed for other transactions. This message notifies the user that the background task has been started. Any error or success messages issued by the background task will appear after the background task has terminated and the user returns to the "ENTER NEXT TASK CODE" prompt.

**Action:** None

**SASO132E PRINTER DEVICE "device-name--->" IS NOT DEFINED IN  
"document-name"**

**Reason:** An attempt has been made to modify or access a printer device which does not exist in the indicated document.

**Action:** The erroneous device will be highlighted. Alter the device or its associated document to a correct value.

**SASO133E PRINTER DEVICE "device-name" IS ALREADY DEFINED IN  
"document-name"**

**Reason:** An attempt has been made to add a printer device which already exists in the indicated document.

**Action:** The erroneous device will be highlighted. Alter the device or its associated document to a correct value.

**SASO137E UTILITY OPERATION FAILED - AN INVALID CHAPTER ID  
HAS BEEN SPECIFIED FOR ADD**

**Reason:** An invalid chapter ID (other than "A", "G", or 1-999) has been specified for a chapter add utility function.

**Action:** Choose another chapter ID ("A", "G", or 1-999) for utility function.

**SASO138I CHAPTER "A" AND SUBJECTS 1-6 SUCCESSFULLY ADDED**

**Reason:** Chapter "A" specified for utility function has been successfully added. Subjects 1-6 (A.1, A.2, A.3, A.4, A.5, and A.6) have also been added under Chapter "A".

**Note:** The print request utility (2.21.16, "Print Request" on page 2-55) processes/prints A.3 and A.4 as forms, replacing the standard page header with a special forms header. The print request utility also processes/prints A.5 as a sample COBOL format program with unique page headers. A.1, A.2, and A.6 are printed with standard page headers.

**Action:** Subject names for A.1, A.2, A.3, A.4, A.5, and A.6 have not been assigned. Subject names can be added using option 3.1 (see Chapter 2, "CA-IDMS/SASO Sessions" on page 2-1). No topics have been added to subjects 1-6 under chapter "A". Topic reference identifiers, topic names, and topic keywords may be added using option 3.2, etc.

**SASO139I CHAPTER "G", SUBJECTS A-Z, AND TOPIC 0 FOR EACH  
SUBJECT ADDED**

**Reason:** Chapter “G” specified for utility function has been successfully added. Subjects A-Z (G.A, G.B, G.C, ... G.Z) have also been added under Chapter “G”. A topic 0 has been added under each subject (G.A.0, G.B.0, G.C.0, ...G.Z.0).

**Note:** The print request utility processes/prints Chapter “G” using special glossary headers and subject presentation.

**Action:** You may upload glossary text to topics G.A.0 through G.A.Z using the topic text upload utility (see Chapter 3, “Batch Utilities” on page 3-1 on ESSTEXT).

**Note:** Due to special print processing, additional topics (that is: G.A.1, G.A.2, etc.) cannot be added.

**SASO140E UTILITY OPERATION FAILED - CHAPTER chapter id ALREADY  
EXISTS**

**Reason:** A chapter identifier that already exists has been specified in the Add/Insert Structure Utility.

**Action:** Specify a chapter other than the one specified.

**SASO141E THE primary-command COMMAND REQUIRES SPECIFICATION  
OF secondary-command**

**Reason:** A primary command has been entered, but subordinate parameters were not supplied.

**Action:** Correct the subordinate syntax and retry the command stream.

**SASO142E RELEASE ID release-id COULD NOT BE LOCATED FOR PURGE  
FUNCTION**

**Reason:** The PURGE command was entered from the Release Maintenance screen, but the supplied ID does not exist in this document.

**Action:** Correct the ID and retry or specify ALL to purge all maintenance release.

**SASO143E subcommand IS THE ONLY VALID PARAMETER FOR THE sub-  
command COMMAND**

**Reason:** An invalid parameter was encountered in the primary command stream for the command indicated by the named subcommand.

**Action:** Correct the incorrect parameter and retry the transaction.

**SASO144E subparameters ARE THE ONLY VALID PARAMETERS FOR THE primary-command COMMAND**

**Reason:** Invalid command subparameters for the primary command have been encountered.

**Action:** Correct the command and retry.

**SASO145E THE HIGHLIGHTED FIELD(S) CONTAINS AN INVALID VALUE**

**Reason:** Each highlighted, enterable field contains an invalid value.

**Action:** Correct the field entries or request HELP for more information about field values.

**SASO146I PRINTER INITIALIZATION SUCCESSFULLY UPDATED**

**Reason:** A printer directive update transaction has successfully completed.

**Action:** None

**SASO147E PRINT DIRECTIVE macro-name IS ALREADY DEFINED FOR device-type PRINTER**

**Reason:** You attempted to add a printer directive macro, but the directive is already define for the indicated print device.

**Action:** Specify another name for the printer directive or modify the existing directive.

**SASO148E PRINT DIRECTIVE macro-name COULD NOT BE LOCATED FOR UTILITY FUNCTION**

**Reason:** You requested a modify or delete transaction against a print directive that does not exist in the current print device.

**Action:** Correct the ID to an existing directive or add the indicated directive.

**SASO149W CONFIGURATION RECORD FOR document DID NOT EXIST BUT HAS BEEN**

**Reason:** A document update transaction has automatically added all necessary document central structures for a new document.

**Action:** None

**SASO150E NO STRUCTURES EXIST IN document FOR COPY FUNCTION**

**Reason:** A copy document request cannot be completed because the FROM document is empty.

**Action:** Select another document as the source of the copy function.

**SASO151E NO STRUCTURES EXIST IN document FOR DOCUMENT UPDATE CREATION**

**Reason:** A request for maintenance derivation has been initiated, but the indicated document is empty.

**Action:** Select another document for maintenance creation or use maintenance copy to copy structures within a populated document.

**SASO152E A APPLY FAILED FOR maintenance-id - NO UNPROCESSED CHAPTERS WERE LOCATED**

**Reason:** The indicated maintenance cannot be applied because all of the chapters have already been individually applied.

**Action:** Select another maintenance group for application or purge the already applied group.

**SASO153W DOCUMENT document IS EMPTY**

**Reason:** An inquiry or update function has been requested against an empty document.

**Action:** Select another document or populate the empty document.

**SASO154E THE macro-name PRINT DIRECTIVE CANNOT BE ERASED**

**Reason:** You tried to use one of CA-IDMS/SASO's special purpose print directive macros.

**Action:** Select another print directive for deletion.

**SASO155I PRINT DIRECTIVE macro-name HAS BEEN SUCCESSFULLY  
ADDED TO device-name PRINTER**

**Reason:** A new printer directive macro has been successfully added to the indicated printer device.

**Action:** None

**SASO156W DOCUMENT document ONLY CONTAINS MAINTENANCE**

**Reason:** You requested a browse or update function for a document, but the document only contains entities in the maintenance area.

**Action:** Select another document or populate the permanent area of the target document.

**SASO157E MISSING CA-IDMS/ENFORCER IMBED STRUCTURE**

**Reason:** An :IM directive was encountered in the CA-IDMS/SASO text for browse, but the indicated DICTIONARY, NODE, ENTITY, and TEMPLATE cannot be located in the CA-IDMS/ENFORCER database.

**Action:** Correct the imbed syntax and retry the browse.

**SASO158E INVALID CA-IDMS/ENFORCER INSTALL**

**Reason:** An CA-IDMS/ENFORCER imbed was detected in the CA-IDMS/SASO text for browse, but CA-IDMS/ENFORCER is not installed properly.

**Action:** Insure that ESXADOC and the CA-IDMS/ENFORCER database are installed properly.

**SASO159E program name: USER NOT AUTHORIZED FOR task-name TASK  
CATEGORY RESOURCE**

**Reason:** The user or group has not been granted execution privileges to access the CA-IDMS/SASO task-name to which control was being transferred. This is a CA-IDMS security failure.

**Action:** Select another function or have the security administrator grant execution privileges to this user/group.

**SASO160E CONFLICTING entity-type SORT CRITERIA - SELECT ONE AND ONLY ONE OPTION**

**Reason:** You have specified more than one sort key for CA-IDMS/SASO list processing for the indicated CHAPTER, SUBJECT, or TOPIC entity type.

**Action:** Select one of the sort keys for the indicated entity and press ENTER.

**SASO161I STRING SEARCH LOCATED THE FOLLOWING TOPICS WHICH CONTAIN THE TARGET**

**Reason:** This message presented in the BROWSE or EDIT topic lists confirms that string search located the target string in each of the listed topics.

**Action:** Select one or more of the topics review or return to the string search screen with the END command.

**SASO163E A DOCUMENT CANNOT BE COMPARED AGAINST ITSELF**

**Reason:** A maintenance create function was requested using comparison facilities, but the FROM and TO documents are the same.

**Action:** Correct the FROM or TO document or select the maintenance copy option.

**SASO164E FROM AND TO DOCUMENTS MUST BE IDENTICAL FOR MAINTENANCE COPY**

**Reason:** You requested a maintenance create function using the copy processed, but the FROM and TO documents are not the same.

**Action:** Erase the TO document, make both document names identical, or select the maintenance comparison option.

**SASO165E ACTIVITY NUMBER MUST BE A NUMERIC BETWEEN 0 AND 255**

**Reason:** An activity number has been specified for DOCUMENT or CHAPTER security and is non-numeric or greater than 255.

**Action:** Correct the highlighted activity number and retry the transaction.

**SASO166E program-name: USER NOT AUTHORIZED FOR activity-type  
ACTIVITY IN DOCUMENT document-name**

**Reason:** The user has failed document security against the indicated document for Browse or Update as indicated by activity-type.

**Action:** Select an authorized document and activity or contact the security administrator to provide necessary execution privileges.

**SASO167E program-name: USER NOT AUTHORIZED FOR activity-type  
ACTIVITY IN CHAPTER chapter-id**

**Reason:** The user has failed chapter security against the indicated chapter for Browse or Update as indicated by activity-type.

**Action:** Select an authorized chapter and activity or contact the security administrator to provide necessary execution privileges.

**SASO168I CHANGE OF STRUCTURE STATISTICS CANCELLED BY USER**

**Reason:** The statistics change transaction was cancelled by the user.

**Action:** None

**SASO169E STATISTICS CHANGE FAILURE - entity-type entity-id NOT  
FOUND**

**Reason:** An entity-type of CHAPTER, SUBJECT, or TOPIC of the indicated reference ID cannot be located at the point of change.

**Action:** This can only happen if another user has deleted the entity immediately prior to the attempted change. REFRESH the list and retry.

**SASO170E EITHER CHANGE STATISTICS VALUES, OR EXECUTE THE  
"END" COMMAND TO EXIT**

**Reason:** The user is executing the statistics change utility, but none of the statistics fields were altered.

**Action:** Change one or more of the statistics fields and press ENTER or execute the END command to cancel statistics change.



**SASO171E A SUBJECT MAY NOT BE RELATED TO ITSELF**

**Reason:** You have attempted to relate a chapter/subject combination to itself.

**Action:** Select another chapter/subject combination for the RELATE operation.

**SASO172E program-name: task-name TASK RESOURCE OR USER/GROUP NOT FOUND**

**Reason:** A user/group global resource type could not be located in the user catalog or a task category resource type could not be located in the system dictionary.

**Action:** Select another function or contact the security administrator with this message.

**SASO173E program-name: #SECHECK INTERFACE PARAMETER LIST ERROR**

**Reason:** An error has been detected in the parameter list supplied/returned during a security check.

**Action:** Contact Computer Associates Technical Support with this message.

**SASO174E program-name: UNKNOWN RETURN CODE FROM #SECHECK INTERFACE**

**Reason:** A return code other than 0 through 12 has been returned from a security check.

**Action:** Contact Computer Associates Technical Support with this message.

**SASO175E program-name: entity-type activity-type ACTIVITY RESOURCE OR USER/GROUP NOT FOUND**

**Reason:** A user/group global resource type could not be located in the user catalog or an update/browse activity resource for a document or chapter could not be located in the system dictionary.

**Action:** Contact the security administrator with this message.

**SASO176E NO MATCH FOUND IN DBNAME TABLE OR DMCL SEGMENT  
FOR dbname-table-definition**

**Reason:** The specified dbname does not match any dbname defined in the DBNAME table or any SEGMENT defined in the DMCL. This error can also occur if a dbname defined in the DBNAME table is invalid. The CA-IDMS error status is 1494.

**Action:** Contact the database administrator at your company with this message.

**SPRS001E A REQUEST OF "request-code" WAS PASSED TO GSISPRS**

**Reason:** "request-code" is an invalid value for the online job submission program. This is a problem internal to the system from which online job submission was requested.

**Action:** Make note of the request code and the screen from which you attempted to submit the job and notify Computer Associates Technical Support.

**SPRS002E AN INVALID REQUEST SEQUENCE WAS ENCOUNTERED IN  
GSISPRS**

**Reason:** The online job submission program expects to be invoked iteratively with request codes in a particular sequence. On this occasion, this sequence has been violated. This is a problem internal to the system from which online job submission was requested.

**Action:** Make note of the screen from which you attempted to submit the job, then notify the Computer Associates Technical Support group responsible for this product.

**SPRS003E THE GET OF (USER, LONG) STORAGE FAILED WHEN IN  
GSISPRS**

**Reason:** The online job submission program requires a USER, LONG storage in 400-byte blocks for the duration of the submit process. A #GETSTG for this amount of storage has failed.

**Action:** This situation is likely to be temporary. Reissue the submit request. If the problem persists, notify your Database Administrator (DBA) of this situation so that sufficient storage can be made available for this request.

**SPRS004E NOTHING SUBMITTED**

**Reason:** The JCL member being submitted appears to be empty.

**Action:** Ensure that the submit function is chosen appropriately. Correct as necessary and retry.

**SPRS005E AN INVALID OPERATING SYSTEM OF "operating-system" WAS PASSED TO GISISGPS**

**Reason:** The online job submission facility encountered the indicated operating-system abbreviation.

Acceptable abbreviations must begin with OS/390, SVS, VS1, CMS, or DOS. The operating system has been determined by accessing the OPSYS field of the CSA (CA-IDMS/DC Common System Area).

**Action:** If your operating system can reasonably be identified by one of those listed above, notify your Database Administrator (DBA) of this situation so that CSAOPSYS can be updated. Otherwise, notify the Computer Associates Technical Support group responsible for this product of your unsupported operating system.

**SPRS006E SUBMIT RESOURCES TEMPORARILY UNAVAILABLE. RETRY**

**Reason:** The online job submission facility allows only one SUBMIT request to be in process at a time. Another user is currently SUBMITting.

**Action:** This situation is likely to be temporary. Reissue the submit request. If the problem persists, notify your Database Administrator (DBA) of this situation.

**SPRS007E operating-system ALLOCATE INTRDR FAILED RC=return-code ERR CDE=error-reason-code INFO CDE=information-reason-code**

**Reason:** The online job submission facility was unable to dynamically allocate a dataset for the internal reader. Variable information in the message depends on the operating system being used. (ERR CDE and INFO CDE will only be present for OS/390 or SVS. See the IBM manual *System Programming Library: Job Management*, topic SVC 99.)

**Action:** This situation may be temporary. Reissue the submit request. If the problem persists, make note of all information in the message and notify your Database Administrator (DBA) of the situation.

**SPRS008E XPCC IDENT/CONNECT FAILED. ID CDE=identification-code ERR CDE=error-reason-code INFO CDE=information-reason-code**

**Reason:** The online job submission facility received an unsuccessful return code from VSE/ESA macro XPCC invoking the IDENTIFY or CONNECT function. The ID CDE indicates which macro call and situation occurred. Further information can be determined from the ERR CDE and INFO CDE values. See the *IBM-VSE/ESA Power Application Programming* manual for further details.

**Action:** This situation may be temporary. Re-issue the submit request. If the problem persists, make note of all information in the message and notify your DBA of the situation.

**SPRS009E XPCC DISCONN/TERMIN FAILED. ID CDE=identification-code**

**Reason:** The online job submission facility received an unsuccessful return code from VSE/ESA macro XPCC invoking the DISCONNECT or TERMINATE function. The ID CDE indicates which macro call and situation occurred.

**Action:** This situation can only occur after the JCL has successfully been submitted. If the problem persists, make note of all information in the message and notify your DBA of the situation.

**SPRS010E XPCC PUT FAILED. ERR CDE=error-code INFO  
CDE=information-reason-code**

**Reason:** The online job submission facility received an unsuccessful return code from VSE/ESA macro XPCC invoking the SENDR function. Further information can be determined from the ERR CDE and the INFO CDE values. See the *IBM-VSE/ESA Power Application Programming* manual for further details.

**Action:** This situation may be temporary. Re-issue the submit request. If the problem persists, make of all information in the message and notify your DBA of the situation.

**TEXT001E DATABASE BIND FAILED FOR document-name**

**Reason:** For central version (CV) job execution, the document name (DBNAME) specified in the keyword parameter has no equivalent in the database name table for the CV being accessed on the SYSCTL card. If local mode, the database name table has not been punched and link edited into the appropriate batch load library.

**Action:** Verify that a DBNAME equivalent to the document name entered on the process input card exists in the CV or in the load library specified in your JCL.

**TEXT002E THE DOCUMENT CONFIGURATION IS MISSING FOR document-name**

**Reason:** The database structure specified for maintenance release offload execution has not been loaded.

**Action:** Establish the document configuration or printer configuration and chapters, subjects, topics, and topic text using online functions or execute the batch upload utility (ESSULOD) to install the CA-IDMS/SASO database structure.

**TEXT003E OBJCHAPTER chapter-id WAS NOT FOUND IN THE document-name DOCUMENT**

**Reason:** The chapter identifier specified on the OBJCHAPTER process input card could not be located on the database associated with the document-name indicated in this message.

**Action:** Correct the JCL by specifying the correct chapter reference identifier and resubmit.

**TEXT004E OBJSUBJECT subject-id WAS NOT FOUND IN THE document-name DOCUMENT**

**Reason:** The subject identifier specified on the OBJSUBJECT process input card could not be located on the database associated with the document-name indicated in this message.

**Action:** Correct the JCL by specifying the correct subject reference identifier and resubmit.

**TEXT005E OBJTOPIC topic-id WAS NOT FOUND IN THE document-name DOCUMENT**

**Reason:** The topic identifier specified on the OBJTOPIC process input card could not be located on the database associated with the document-name indicated in this message.

**Action:** Correct the JCL by specifying the correct topic reference identifier and resubmit.

**TEXT006E TEXT FILE EMPTY**

**Reason:** The database structure upload file, TEXT, is empty. The probable cause is incorrect JCL specification.

**Action:** Correct upload JCL and resubmit.

**TEXT007I SUCCESSFUL TOPIC TEXT UPLOAD**

**Reason:** The CA-IDMS/SASO topic text data structure file has been successfully installed.

**Action:** None

**TEXT008W TEXT STRUCTURE NOT FOUND, "REPLACE" CHANGED TO ADD**

**Reason:** The CA-IDMS/SASO topic specified in the process input cards did not contain text records. The "REPLACE" parameter specified in the process input card was altered to perform an add function.

**Action:** None

**TEXT009E TEXT UPLOAD TERMINATED - "REPLACE" NOT SPECIFIED FOR EXISTING TOPIC TEXT**

**Reason:** An attempt to upload text to a topic which already contains text records has been terminated due to the absence of the "REPLACE" parameter on the process input card.

**Action:** If the topic text structure is acceptable as loaded, no action is required. If a reload is required, correct the JCL by specifying the REPLACE option in the process input statements and resubmit.

**TPE7001E INVALID PARM LIST FOR process-name - PARM NUMBER = parm-number**

**Reason:** An invalid parameter sequence was specified during CA-IDMS/DC SORT processing, where x represents the TPSPROC value, and y represents the number of the invalid parameter.

**Action:** Review the CA-IDMS/DC SORT parameters for errors. If the syntax is correct, contact Computer Associates Technical Support.

**TPE7002E INVALID TPS-REQUEST VALUE OF request-type**

**Reason:** CA-IDMS/DC SORT found a value other than 'U' or 'S' in TPSRQST.

**Action:** Review the CA-IDMS/DC SORT parameters for errors. If the syntax is correct, contact Computer Associates Technical Support.

**TPE7003E INVALID TPS-ELEMENTS TYPE OF element-type**

**Reason:** CA-IDMS/DC SORT found a value other than 'I', 'C' or 'P' in TPSELEM.

**Action:** Review the CA-IDMS/DC SORT parameters for errors. If the syntax is correct, contact Computer Associates Technical Support.

**TPE7004E REQUEST OF request-type INVALID WITH ELEMENTS OF element-type**

**Reason:** The value in TPSRQST conflicts with the value in TPSELEM. If TPSRQST has a value of 'U', TPSELEM must have a value of 'T' or 'C'. If TPSRQST has a value of 'S', TPSELEM must have a value of 'P' or blank.

**Action:** Review the CA-IDMS/DC SORT parameters for errors. If the syntax is correct, contact Computer Associates Technical Support.

**TPE7005E INVALID VALUE FOR PROCESS process-type - PARM NUMBER = parm-number**

**Reason:** The parameter number is in the format xy. A value in the TPSPROC parameter list, represented by x, is invalid. Y represents the sequential number of the parameter.

**Action:** Review the CA-IDMS/DC SORT parameters for errors. If the syntax is correct, contact Computer Associates Technical Support.

**TPE7006E INVALID PROCESS VALUE OF process-type**

**Reason:** TPSPROC contains a value other than 'SETSORT', 'PUTSORT', 'GETSORT' or 'ENDSORT'.

**Action:** Review the CA-IDMS/DC SORT parameters for errors. If the syntax is correct, contact Computer Associates Technical Support.

**TPE7007E NO SETSORT PERFORMED FOR SESSION session-number**

**Reason:** TPSPROC value of 'PUTSORT', 'GETSORT' or 'ENDSORT' was specified, but no CA-IDMS/DC SORT controls were set up for this session.

**Action:** Enter the necessary syntax to establish a SETSORT for this session.

**TPE7008E DUPLICATE SETSORTS ISSUED FOR SESSION session-number**

**Reason:** The indicated sort session contains two SETSORT requests without an intervening ENDSORT within a single task invocation.

**Action:** Include an ENDSORT prior to the second SETSORT for this session.

**TPE7009E INVALID NUMBER OF SORT KEYS SPECIFIED FOR SESSION  
session-number**

**Reason:** The number of keys is less than 1 or greater than 16.

**Action:** Review the CA-IDMS/DC SORT parameters for errors. If the syntax is correct, contact Computer Associates Technical Support.

**TPE7010E RECORD LENGTH IS 0 OR BEYOND MAXIMUM FOR SESSION  
session-number**

**Reason:** The TPSRLen field is less than 1 or greater than 32,000 for CA-IDMS or 16,000 for CICS.

**Action:** Contact Computer Associates Technical Support.

**TPE7011E PUTSORT BUFFER NOT SPECIFIED FOR SESSION session-  
number**

**Reason:** In the indicated session-number, a SETSORT request was made without a record-name parameter.

**Action:** Review the CA-IDMS/DC SORT parameters for errors. If the syntax is correct, contact Computer Associates Technical Support.

**TPE7012E INVALID DISPLACEMENT FOUND IN KEY OCCURRENCES  
FOR SESSION session-number**

**Reason:** The sort-control record for the indicated session contains incorrect values. An element that is not in the session record has been specified in the FIELDS statement.

**Action:** Correct the invalid FIELDS statement.

**TPE7013E KEY LENGTH EXCEEDS RECORD BOUNDARY FOR SESSION  
session-number**

**Reason:** The field-length specified for a field-name in a FIELDS statement exceeds the record boundary.

**Action:** Correct the invalid FIELDS statement.



**TPE7014E INVALID KEY ORDER OF sort-order FOR SESSION session-number**

**Reason:** An invalid sort order was specified in the keys section.

**Action:** Correct the value to A or D in the sort keys table.

**TPE7015E MAIN AND AUX EXCEEDED - UNABLE TO CONTINUE**

**Reason:** In the current sort session, the maximum number of bytes allowed in MAIN and AUX has been exceeded.

**Action:** In the user program, check for program loops which may be causing excessive PUT requests. If the program logic is correct, have your system programmer review the MAIN and AUX values in the TPSPARM macro to determine whether they need to be increased. See Chapter 4, “Operations” on page 4-1 for more information.

**TPE7016E PUTSORT DISALLOWED AFTER GETSORTS FOR SESSION session-number**

**Reason:** The applications program has attempted to write another record after one or more GET requests have been issued.

**Action:** Remove the PUTSORT from the program logic or close and open the session with an ENDSORT/SETSORT sequence.

**TPE7017E STORAGE FAILURE DURING SORT PROCESSING**

**Reason:** A required storage block allocation failed.

**Action:** Retry the application. If this message is frequently issued, review storage pool definitions for your online regions.

**TPE7018E THE RETURN ADDRESS FOR SORTED RECORDS WAS NOT SPECIFIED FOR GETSORT**

**Reason:** The buffer address of the area into which sorted records are returned has been overlaid.

**Action:** Review program logic to ensure that a loop has not overlaid TPSORT control blocks. If there is no apparent cause for the control block alteration, contact Computer Associates Technical Support.

**TPE7019E NO RECORDS WERE SORTED FOR SESSION session-number**

**Reason:** The sort queue for the indicated session-number was empty.  
A GETSORT request was issued, but no records were sent to CA-IDMS/DC SORT through PUTSORT requests.

**Action:** Review your program to determine if the condition is appropriate.

**TPE7020E END OF SET ENCOUNTERED FOR SESSION session-number  
DURING process-type PROCESS**

**Reason:** The top or bottom of the sorted queue for the indicated session has been reached. Process-type indicates if the condition occurred during NEXT or PRIOR processing.

**Action:** If you wish to take advantage of this condition and execute special processing at the end of the queue, add program logic to trap the TPSRETN value 7020. The content of the sorted record is unpredictable until another GETSORT request is successfully executed.

**TPE7040E INVALID SESSION VALUE OF session-number**

**Reason:** The session-number specified in the SESSION statement is not an integer between 0 and 9.

**Action:** Correct the SESSION statement and retry the preprocessor.

**TPE7041E MISMATCH ON TPSKNUM AND ACTUAL PARAMETERS FOR  
SESSION session-number**

**Reason:** The number in TPSKNUM and the number of parameters in the interface call to TPSET do not agree.

**Action:** Contact Computer Associates Technical Support.

**TPE7044E SETLIMIT OCCURRED AFTER PUTSORT FOR SESSION n**

**Reason:** A SETLIMIT statement for session n appears in the program after one or more PUTSORT statements for session n. For a given session, SETLIMIT must appear before any PUTSORTs.

**Action:** Correct the program by moving the SETLIMIT statement for session n to a position after the SESSION statement for session n and before any PUTSORTs for session n.

**TPE7045E SETLIMIT ATTEMPTED, BUT INSTALLATION PROHIBITS USE**

**Reason:** The program contains a SETLIMIT statement, but your installation prohibits its use.

**Action:** Correct the program by removing the SETLIMIT statement. Or, contact your systems programmer to reassemble the tailoring macro TPSPARM. This macro currently specifies LIMLOCK=Y, which prohibits use of the SETLIMIT statement. To allow use of SETLIMIT, TPSPARM must be reassembled with LIMLOCK=N, and CA-IDMS/DC SORT must be relinked with the reassembled TPSPARM object deck.

**TPP7021E MODULE module-name NOT FOUND**

**Reason:** The user has attempted to execute the CA-IDMS/DC SORT CA-ADS preprocessor. The module name parameter from the datastream or the user display cannot be located in the dictionary/node/version specified.

**Action:** Correct module name, dictionary, node, and/or version.

**TPP7022E DATABASE BIND FAILED FOR INDICATED DICT AND  
NODE--RECHECK THESE VALUES**

**Reason:** The dictionary and/or node specified to the CA-IDMS/DC SORT CA-ADS preprocessor does not exist under the current CV.

**Action:** Correct dictionary and/or node names.

**TPP7023E INVALID DATA LINE ON TPSG**

**Reason:** An invalid or missing datastream has been entered as part of the execution of the TPSG task.

**Action:** Enter the required information in the screen display.

**TPP7024E INVALID MODULE NAME IN INPUT DATA LINE**

**Reason:** An invalid module-name format was specified as part of the TPSG task datastream. The module name must be between 1 and 32 alphanumeric, non-space characters.

**Action:** Correct the module name in the user display.

**TPP7025E INVALID PARAMETER AFTER DEFAULT VERSION**

**Reason:** Following the version-number default, the next fields must be a 1- to 8-character dictionary name or dictionary name default (represented by a comma), followed by a 1-to 8-character node name or node name default (represented by a comma).

**Action:** Correct dictionary and/or node values in the user display.

**TPP7026E INVALID VERSION NUMBER IN INPUT DATA LINE**

**Reason:** The parameter after the module name in the TPSG task datastream must be a display integer between 1 and 9999 or the version number default (represented by a comma).

**Action:** Enter a valid version number in the user display.

**TPP7027E INVALID ALTERNATE DICTIONARY NAME**

**Reason:** The dictionary name in the TPSG task datastream is not a 1- to 8-character alphanumeric field or the dictionary default (represented by a comma).

**Action:** Enter a valid dictionary name in the user display.

**TPP7028E INVALID ALTERNATE NODE NAME**

**Reason:** The node name in the TPSG task datastream is not a 1- to 8-character alphanumeric field or the node default (represented by a comma).

**Action:** Enter a valid node name in the user display.

**TPP7029E MODULE TEXT ENDED WITH IMPROPERLY TERMINATED  
TPSORT SYNTAX**

**Reason:** The end of the CA-ADS process source was reached, but a CA-IDMS/DC SORT syntax set was still in progress. CA-IDMS/DC SORT syntax must be terminated with a period (.) or a semi-colon (;), and must wholly reside within a single, non-included module.

**Action:** Correct the syntax using the EDITOR, issuing a RETRY in the EDITOR command line, or CANCEL the preprocessor section.

**TPP7030E MINIMUM ENTRY OF MODULE NAME IS REQUIRED**

**Reason:** To initiate a CA-IDMS/DC SORT CA-ADS Preprocessor session, a minimum entry of module name is required.

**Action:** Enter a module name in the user display.

**TPP7031I PREPROCESSING TERMINATED BY USER REQUEST**

**Reason:** The user has requested the termination of the current CA-IDMS/DC SORT preprocessing.

**Action:** None

**TPP7032E SYNTAX OVERFLOW - TOO MANY CONTIGUOUS LINES IN A SINGLE TPSORT STATEMENT**

**Reason:** A single CA-IDMS/DC SORT syntax statement can only occupy 50 lines of user source.

**Action:** Reduce the number of lines in the indicated statement to 50.

**TPP7033E INVALID WORD word IN STATEMENT/WORD word-position**

**Reason:** An invalid or misplaced word has been detected in the CA-IDMS/DC SORT syntax, where word-position represents the sequential position in the CA-IDMS/DC SORT statement.

**Action:** Correct the CA-IDMS/DC SORT syntax and enter RETRY in the EDITOR command line.

**TPP7034E INCOMPLETE OR INVALID STATEMENT AT WORD word**

**Reason:** A CA-IDMS/DC SORT statement has been incorrectly specified. Usually this error occurs because the statement terminator was encountered before a substatement was fully qualified.

**Action:** Correct the CA-IDMS/DC SORT syntax and enter RETRY in the EDITOR command line.

**TPP7035E SUBPARAM parameter-number SEQUENTIAL POSITION OF  
WORD IS OF INCORRECT LENGTH**

**Reason:** A parameter substatement has failed a length edit at the specified word.

**Action:** Correct the CA-IDMS/DC SORT syntax and enter RETRY in the EDITOR command line.

**TPP7036E WORD word WAS FOUND WHEN TERMINATION WAS  
EXPECTED**

**Reason:** Instead of the expected terminator, the specified word was encountered.

**Action:** Correct the CA-IDMS/DC SORT syntax and enter RETRY in the EDITOR command line.

**TPP7037E AT LEAST ONE SET OF FIELDS MUST BE SPECIFIED**

**Reason:** The current SETSORT request requires a FIELDS keyword and one or more sets of FIELDS subparameters.

**Action:** Correct the SETSORT syntax and retry the preprocessor.

**TPP7038E RECORD record-name NOT FOUND**

**Reason:** The SETSORT statement specified a record that could not be located in the indicated dictionary/node/version.

**Action:** Correct the FOR statement and retry the preprocessor.

**TPP7039E ELEMENT element-name NOT IN INDICATED RECORD**

**Reason:** An element-name in the FIELDS statement could not be located in the record specified in the FOR statement.

**Action:** Correct the statement in error and retry the preprocessor.

**TPP7042I SUCCESSFUL UPDATE OF MODULE module-name**

**Reason:** The indicated module has been successfully updated.

**Action:** None

**TPP7043E DICTIONARY UNABLE TO BE READIED IN UPDATE MODE**

**Reason:** An attempt has been made to update the indicated dictionary in update mode. This error is associated with the CA-ADS Preprocessor only.

**Action:** Check the status of the area or specify another dictionary.

**TPP7046I SUCCESSFUL PREPROCESS OF TPSORT STATEMENTS**

**Reason:** The TPSG verb was entered in the CA-IDMS/Dictionary Module Editor, and the syntax was preprocessed without errors.

**Action:** None

**TPP7047E ERROR(S) DETECTED IN TPSORT STATEMENT(S)**

**Reason:** The TPSG verb was entered in the CA-IDMS/Dictionary Module Editor, and errors were encountered in the TPSORT syntax.

**Action:** Review the embedded error messages following each TPSORT statement in error and reenter the TPSG verb after all errors are corrected.

**TPP7048E ELEMENT element-name IS A CONDITIONAL NAME (88 LEVEL)**

**Reason:** An element-name is an 88-level condition name and cannot be used as a sort key. A field name is required.

**Action:** Replace element-name with a valid field name.

**TPP7091E ESAMcode END OF FILE REACHED (BEYOND BOTTOM)**

**Reason:** An error occurred during the CA-IDMS/DC SORT CA-ADS preprocessor interface to the Editor.

**Action:** Contact Computer Associates Technical Support.

**TPP7092E ESAMcode INVALID PARAMETER LIST**

**Reason:** An error occurred during the CA-IDMS/DC SORT CA-ADS preprocessor interface to the Editor.

**Action:** Contact Computer Associates Technical Support.

**TPP7093E ESAMcode ILLEGAL CALL (PUT BEFORE OPEN)**

**Reason:** An error occurred during the CA-IDMS/DC SORT CA-ADS preprocessor interface to the EDITOR.

**Action:** Contact Computer Associates Technical Support.

**TPP7094E ESAMcode AN I/O ERROR OCCURRED. I/O ERROR CODE: error-code**

**Reason:** An error occurred during the CA-IDMS/DC SORT CA-ADS preprocessor interface to the EDITOR.

**Action:** Contact Computer Associates Technical Support.

**TPP7095E ESAMcode UNEXPECTED RETURN CODE WHILE CREATING THE SOURCE TEXT AREA**

**Reason:** An error occurred during the CA-IDMS/DC SORT CA-ADS preprocessor interface to the EDITOR.

**Action:** Contact Computer Associates Technical Support.

**TPP7096E GSIUPLOW MODULE ERROR MESSAGE: error-message**

**Reason:** An error occurred during the case change to CAPS ON for the CA-IDMS/DC SORT CA-ADS preprocessor.

**Action:** Contact Computer Associates Technical Support.

**TPU7050E NO RECORD NAME FOUND IN SORT-CONTROL BLOCK**

**Reason:** The current request requires a record name in TPSRECN.

**Action:** Contact Computer Associates Technical Support.

**TPU7051E NON-IDMS INTERFACE REQUIRES ELEMENT NAMES**

**Reason:** A non-CA-IDMS USER request requires element names in TPSKOCCS.

**Action:** If the call was formatted by a preprocessor, contact Computer Associates Technical Support.



**TPU7052E RECORD NOT FOUND IN DICTIONARY**

**Reason:** A CA-IDMS USER request is in progress, but the value specified in TPSRECN cannot be located using the values in TPSRVRS, TPSDICT, and TPSNODE.

**Action:** Correct the values which are in error, recompile the dialog or program, and reexecute.

**TPU7053E NUMBER OF ELEMENTS IN RECORD EXCEEDS 720**

**Reason:** This release of CA-IDMS/DC SORT does not support a USER request for records that contain more than 720 elements.

**Action:** Create a new record equivalent containing 720 or fewer elements, recompile the dialog or program, and reexecute.

**TPU7054E MAIN STORAGE NOT AVAILABLE**

**Reason:** Sufficient storage was not available to complete the USER request.

**Action:** Increase the available user storage for the TP monitor.

**TPU7055I USER CANCELED SORT**

**Reason:** A USER sort request was terminated before a key was specified.

**Action:** None The user program must contain logic to recognize this condition.

**TPU7056E NUMBER OF SORT KEYS EXCEEDS 16**

**Reason:** During a USER sort request, the user specified more than 16 keys.

**Action:** Reinvoke the USER sort request, specifying 16 or fewer keys.

**TPU7057E SEQUENCE NUMBER MUST BE BETWEEN 1 AND 16**

**Reason:** A value other than 1 through 16 was specified in the SEQUENCE field on the CA-IDMS/DC SORT USER screen.

**Action:** Correct the indicated SEQUENCE field.

**TPU7058E SEQUENCE NUMBER IS A DUPLICATE**

**Reason:** More than one SEQUENCE field contains the same value on a USER sort screen.

**Action:** Correct the appropriate SEQUENCE entry.

**TPU7059E SORT ORDER IS MISSING**

**Reason:** A SEQUENCE value was specified for an element in the CA-IDMS/DC SORT USER screen, but the ORDER value is missing.

**Action:** Add a related ORDER value or remove the indicated SEQUENCE value.

**TPU7060E SORT ORDER MUST BE (A) OR (D)**

**Reason:** An ORDER value other than 'A' or 'D' was specified on the USER screen.

**Action:** Specify 'A' to sort in ascending order, or 'D' to sort in descending order, or remove the SEQUENCE and ORDER entries.

**TPU7061E AN IMPROPER PF KEY WAS PRESSED**

**Reason:** During USER screen processing, an undefined PF key was pressed.

**Action:** Press the appropriate key.

**TPU7062E EXECUTION REQUIRES ALL ERRORS CORRECTED**

**Reason:** The PF3 key was pressed to execute the sort from the USER screen, but errors remain in the SEQUENCE and ORDER fields.

**Action:** Correct the indicated errors, press ENTER to validate, and then retry PF3.

**TPU7063E IDMS INTERFACE ABEND - IDMS STATUS idms-status**

**Reason:** During CA-IDMS/DC SORT USER processing, an unidentified CA-IDMS abend occurred. The CA-IDMS status code for the error can be found in TPSRETN.

**Action:** See the *CA-IDMS Messages and Codes Guide*.

**TPU7064E SEQUENCE NUMBER MISSING**

**Reason:** The sequence numbers specified on the USER screen must begin with 1 and proceed sequentially.

**Action:** Correct the sequence number order, press ENTER to validate, and retry PF3.

**TPU7065E CURSOR NOT POSITIONED ON SEQUENCE OR ORDER FIELD  
IN ERROR**

**Reason:** PF1 was pressed during a USER session to expand a short error message on a detail line. There are two possible errors:

1. The cursor must be on an item in the SEQUENCE or ORDER column that has a short error message following it.
2. The indicated detail line has no error message(s).

**Action:** Move the cursor to the detail line item for which a message expansion is needed and press PF1 again.

**TPU7066E ONE OR MORE DETAIL FIELDS ARE IN ERROR**

**Reason:** ORDER or SEQUENCE fields have errors. Each field in error has its own associated short error message.

**Action:** Move the cursor to a detail line item for which a message has been issued. Press PF1 to see an expanded message.

Correct the fields in error and press ENTER to reedit the screen values.

**ULOD001I SUCCESSFUL UPLOAD FOR document-name DOCUMENT**

**Reason:** The CA-IDMS/SASO data structure file has been successfully installed in the database (document) specified in the process input card.

**Action:** None

**ULOD002E ESSDLOD FILE EMPTY**

**Reason:** The database structure upload file, ESSDLOD, is empty. The probable cause is incorrect JCL specification.

**Action:** Correct upload JCL and resubmit.

**ULOD003E ATTEMPTED RELOAD WHEN STRUCTURE IS ALREADY IN PLACE FOR document-name**

**Reason:** A second attempt has been made to upload the CA-IDMS/SASO database associated with the document name (DBNAME) specified in the JCL process input parameters.

**Action:** If the structure is acceptable as loaded, no action is required. If a reload is required, correct the JCL by specifying the REPLACE option in the process input statements and resubmit.

**ULOD004E FIRST RECORD IN ESSDLOD FILE NOT CTRLA TYPE**

**Reason:** A severe sequencing error has been encountered in the CA-IDMS/SASO data structure upload file.

**Action:** Contact Computer Associates Technical Support and tell them the message number indicated in the message.

**ULOD005E CHAPTER REFERENCE ERROR**

**Reason:** An unrecoverable error has occurred in the CA-IDMS/SASO data structure upload file.

**Action:** Contact Computer Associates Technical Support and tell them the message number indicated in the message.

**ULOD006E SUBJECT REFERENCE ERROR**

**Reason:** An unrecoverable error has occurred in the CA-IDMS/SASO data structure upload file.

**Action:** Contact Computer Associates Technical Support and tell them the message number indicated in the message.

**ULOD007E INVALID RECORD TYPE OF x IN ESSDLOD FILE**

**Reason:** An unrecoverable error has occurred in the CA-IDMS/SASO data structure upload file.

**Action:** Contact Computer Associates Technical Support and tell them the message number indicated in the message.

**ULOD008E DATABASE BIND FAILED FOR document-name**

**Reason:** For central version (CV) job execution, the document name (DBNAME) specified in the keyword parameter has no equivalent in the database name table for the CV being accessed on the SYSCTL card. If local mode, the database name table has not been punched and link edited into the appropriate batch load library.

**Action:** Verify that a DBNAME equivalent to the document name entered on the process input card exists in the CV or in the load library specified in your JCL.

**ULOD009E ATTEMPTED REPLACE WHEN STRUCTURE DOES NOT EXIST  
FOR document-name**

**Reason:** An attempt has been made to reload (REPLACE) the CA-IDMS/SASO database associated with the document name (DBNAME) specified in the JCL process input parameters.

**Action:** Correct the JCL by removing the REPLACE option from the process input statements and resubmit.



## Appendix A. Adding Multiple CA-IDMS/SASO Documents

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This appendix explains how to establish a multiple CA-IDMS/SASO database environment.

Before you define a document to the CA-IDMS/SASO document control structure, you must install the physical database to house the document. This appendix suggests ways to establish a multiple CA-IDMS/SASO database environment. Once a multiple database environment is established, you can add other documents to the system.

## A.1 How to Install Multiple Databases

To install a multiple database environment in an OS/390 environment, follow these steps:

1. Create an alternate DMCL segment.
2. Allocate and initialize the new database files.
3. Prepare your CA-IDMS/DC environment.
4. Define the new database to the CA-IDMS/SASO document control structure.
5. Load the database.

If completing any of the above steps produces messages, refer to the Online Message Facility or Chapter 5, “Messages” on page 5-1 for an explanation.



## A.2 Step 1. Create an Alternate DMCL Segment

Define the physical components of the new database. You can create a new segment that identifies unique files and area names by specifying values for the following variables, adding other syntax as needed. Keys to variables are contained in source library member ESSAPPDM:

Segment Definition:

- segment-name

File Definitions:

- segment\_name.file\_name1
- ddname1
- data\_set\_name1
- segment\_name.file\_name2
- ddname2
- data\_set\_name2

Area Definitions:

- segment\_name
- start\_page1 through start\_page5.

Figure A.1 shows file block counts that you use to determine the first page in the area. Be sure to use the same page count, page size, and file block specifications from the initial CA-IDMS/SASO installation segment for input to IDMSBCF.

File Number	Area Name	Start Block	Block Count
File 1:	ESS-CTRL-AREA	1	95
	ESS-TEXT-AREA	96	760
	ESS-INDEX-AREA	856	95
File 2:	ESS-RELSE-AREA	1	240
	ESS-RTEXT-AREA	241	235

*Exhibit A.1: Determine First Page Number in Area*

**Note:** There should be only one CA-IDMS/SASO Document Control segment (ESSFIL3, ESS-CTRLD-AREA) per central version (CV). Therefore, do not include File 3 in this step.

## A.3 Step 2. Allocate and Initialize the New Database Files

1. Allocate files for the new database. Use a standard space allocation job for your environment. Include the dataset names DDnames defined in the Create Alternate DMCL Segment section above and using the guidelines in Figure A.2, specify the correct number of blocks.

File Number	Number of Blocks	Page Size
File 1	950	9076
File 2	475	9076

*Exhibit A.2: Space Allocation Requirements*

The page size, page count, and number of blocks may have been changed when you executed the Create Alternate DMCL Segment step. If these changes were made, make those same modifications here.

2. Initialize the new database. Specify values for the following variables using source library member ESSAPPI as input to IDMSBCF. Keys to variables are contained in member ESSAPPI:

- segment\_name
- file\_name1
- file\_name2

**Note:** Each CV can have only one File 3 (ESSFIL3, ESS-CTRLD-AREA). Therefore, do not include File 3 in this step.

## A.4 Step 3. Prepare Your CA-IDMS/DC Environment

1. Specify the segment name (`segment_name`) defined in the Create Alternate DMCL Segment step and the name of your system DMCL (`your_dmcl_name`) in source library member ESSAPPIN. Include the modified ESSAPPIN member into the global DMCL of your target CV.
2. Include the new initialized database files in the start-up JCL of your target CV.
3. Specify your system database table name (`db_table_name`), the unique database name of your document (`db_name`), and the new segment name (`segment_name`) defined in the Create Alternate DMCL Segment step, in source library member ESSAPPDB. Include modified member EESSPPDB in your system database name table.
4. Refer to the User Guide for the product you are installing to address security issues.
5. Regenerate your system DMCL, Database Name Table, and the target DC/UCF-CV system.

**Note:** A key to variables in the above steps is contained in source library members.

## **A.5 Step 4. Define New Database to CA-IDMS/SASO Document Control Structure**

Define the database name (db\_name) from Step 3 above to the CA-IDMS/SASO Document Control Structure by using the Add Document utility (see 2.31.4, “Add Document Utility” on page 2-85).

This name must match the unique database name (db\_name) included in your system database name table.

## A.6 Step 5. Load the Database

Load the database using one of the following:

- The batch utility functions to download and upload a specific document
- The online functions to establish document structures.

### A.6.1 Batch Utility Functions

See Chapter 3, “Batch Utilities” on page 3-1 for information about the following operations:

- ESSDLOD downloads an installed CA-IDMS/SASO database structure to a transportable file.
- ESSULOD uploads the CA-IDMS/SASO downloaded structure file to a specified database.
- ESSTEXT uploads 80 byte records from a sequential file (TEXT) into the primary areas of the installed database as topic text. You can upload multiple topics simultaneously to a document.

### A.6.2 Online Functions

See Chapter 2, “CA-IDMS/SASO Sessions” on page 2-1 for information about the following functions:

- Defining the document and structures.
- Defining textual contents and print control directives.
- Establishing document and printer configurations for printing the document.



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